

# FitCity7

PROMOTING PHYSICAL ACTIVITY  
THROUGH DESIGN

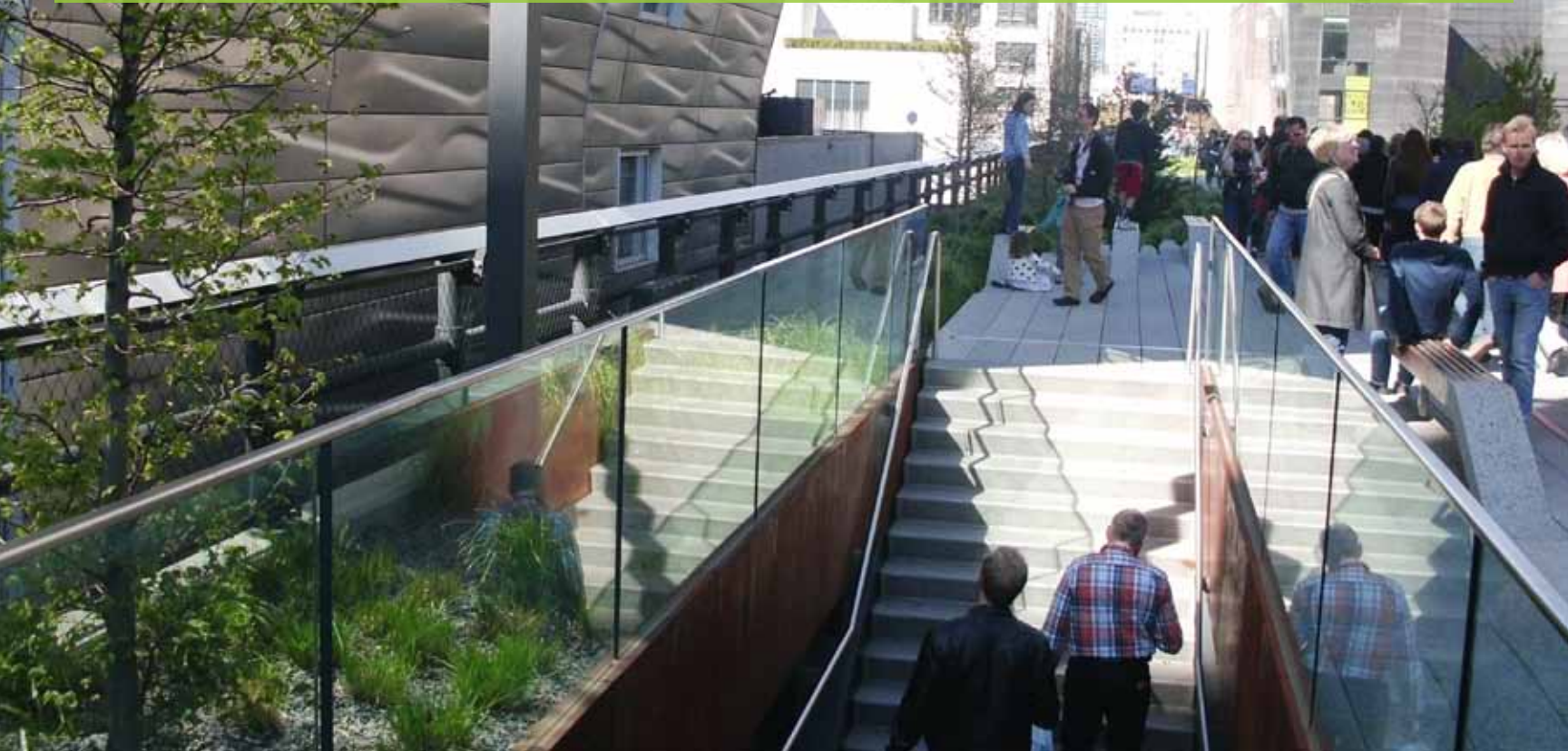


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Cover  
Credit: Rick Bell, FAIA

INTRODUCTION

Active Design has developed from an idealistic vision into a recognizable movement with coherent goals and specific metrics. Evidence of its vigor is all around us.

Fit City

Fit City 7, held on May 21st, 2012 at the Center for Architecture, was the seventh annual conference. When the New York Chapter of the American Institute of Architects (AIANY) and the New York City Department of Health and Mental Hygiene (DOHMH) organized the first Fit City event in 2006, few would have anticipated this local effort reaching a national or even global scale. Though there has never been a shortage of architects, planners, and public health officials who understand the relationship between the built environment and human well-being, only a handful saw the possibility that collaborative efforts involving the public, private, and nonprofit sectors could translate that perception into coordinated, effective action.

Active Design has developed from an idealistic vision into a recognizable movement with coherent goals and specific metrics. Evidence of its vigor is all around us: small-scale messages like stair prompts, building designs conducive to physical activity, street-scale reconfigurations that make the public right-of-way safer, neighborhood-scale changes and amenities, changes in regulatory practices and incentives, and new terms of civic debate.

The seventh conference in the Fit City series, augmented in 2011 by Fit Nation events in Washington, DC and New Orleans, marks the evolution of Active Design from a series of promising local case studies to a “policy mode”

effort that other communities can emulate, adapting general principles to local conditions.

With Fit City 7 attendance and participation by health, architecture, and urban planning professionals from other U.S. cities, Canada, the U.K., Australia, and Brazil, who met at Fit City 7 as well as a “Fit World” symposium the day after Fit City 7, the New York City movement is indeed going global. This publication includes highlights from the event’s presentations and speakers’ remarks.

Joseph J. Aliotta, AIA, LEED AP, President, AIA New York Chapter

Over the last six years, AIA New York has partnered with the DOHMH to organize Fit City conferences. 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 affects health issues, namely obesity and chronic diseases. As architects, we know that the spaces we design have enormous impact on some of the most important issues facing our country and our world – our energy consumption, the environment, the livability of our communities and the health of our citizens. I encourage you to think creatively and openly, and share ideas on how we can take Active Design to the next level and how you can contribute to make these changes happen.

**Karen K. Lee, MD, MHSc, FRCPC, Built Environment and Active Design Director, NYC Department of Health and Mental Hygiene**

In the 19th century, infectious diseases and the epidemics of that day were fundamentally brought under control using our city’s codes, planning, and infrastructure to prevent the spread of disease. They were effective, so we know that this can be done. In the 21st century, we are suffering from chronic diseases, many of which we can think of also as diseases of energy: too much energy in (unhealthy food, unhealthy beverages), and not enough energy out in the form of regular, preferably daily physical activity.

Chronic diseases like diabetes, heart disease, strokes, and cancers are now the leading causes of death. The top risk factors are tobacco use followed by poor diet and physical inactivity. Four of the five risk factors are impacted by the energy equation. In 1985, when the U.S. Centers for Disease Control and Prevention (CDC) began collecting obesity data, there was no U.S. state above 14% obesity in adults. This changed very quickly: by 2010, many states are above 30% and no state is below 20%. We know our genes have not changed over 30 years, but our built environment certainly has changed tremendously.

We go through life these days without actually having to move at all, and unhealthy foods

and beverages are all around us. But there’s good news: a growing body of evidence shows that how we design our buildings, streets, and neighborhoods can affect physical activity and diet. So we can design our environment to increase stair use, active recreation, and active transportation. We can increase access to healthy foods and beverages, decrease exposure to unhealthy foods and beverages, and give people point-of-decision information, such as calorie postings and stair-promoting signage, at restaurants and in our buildings.

Building patterns that are compact, rather than sprawling, can help us avoid unnecessary infrastructure costs. We can save our populations, households and families money: if you live in a walkable, transit-rich neighborhood, you spend, on average, 9% of your income on transportation versus 25% in completely auto-dependent neighborhoods. We can create jobs, because building an infrastructure that includes bicycling and walking opportunities creates more jobs per million dollars spent than building a road infrastructure for cars only. And we’re

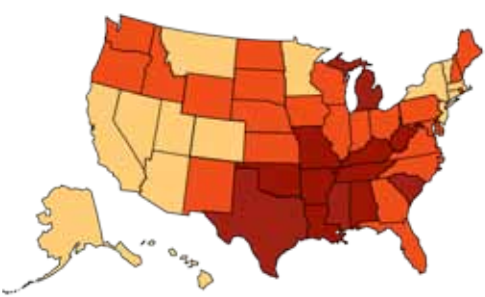
seeing increasingly that Americans actually want to live in smart-growth communities over sprawled communities.

The *Active Design Guidelines* have been named in four national awards, not just in health but also in environmental protection, sustainable buildings, and architecture. We’ve distributed these guidelines nationally and internationally. We’ve trained thousands of built-environment professionals. We’ve developed LEED innovation Sources for physical activity, for healthy food and beverage promotion, and for urban agriculture. We’ve passed city policies that you’re going to hear about from our Deputy Mayor and from our commissioners. We’ve increased commuter cycling, bus and subway ridership, stair use, and places where children play. We’ve decreased traffic fatalities, car registrations, and traffic volumes. We’ve mentored 14 other U.S. cities and communities, with others now adopting initiatives such as integrating the *Active Design Guidelines* into their own policies. We have actually started reversing the childhood obesity epidemic.

**Obesity Trends\* Among U.S. Adults  
BRFSS, 1990**



**Obesity Trends\* Among U.S. Adults  
BRFSS, 2010**



○ No Data    ● <10%    ● 10%-14%    ● 15%-19%    ● 20%-24%    ● 25%-29%    ● 30% +

\*BMI > 30, or ~30 lbs overweight for 5’ 4” woman

In 1990, there was no state in the U.S. with an obesity rate in adults above 14%. This changed very quickly: by 2010, many states are above 30% and no state is below 20%.  
Credit: U.S. Centers for Disease Control and Prevention



**MAYOR'S OBESITY  
TASK FORCE PANEL:  
CREATING A  
HEALTHIER, MORE  
FIT NYC**

**Rick Bell, FAIA, Executive Director,  
AIA New York Chapter**  
Someone once said, “If you’re walking down the right path and you’re willing to keep walking, eventually you’ll make progress.” I thought it was Yogi Berra, but I was corrected: it was President Obama, and not too long ago. *Solvitur ambulando* – “It is solved by walking” – was famously said by Saint Augustine. How can we ensure that the Active Design concepts become more integrated in the way we do business as a city for the long term, including future administrations? Are there ways that this has become part of the culture already? Or can it be through efforts of those here in the room, and into the next mayoral administration?



Exercise break  
Credit: Center for  
Architecture

Linda I. Gibbs, Deputy  
Mayor for Health and  
Human Services  
Credit: Laura Trimble  
Elbogen

**Opening:**  
**Linda I. Gibbs, Deputy Mayor for  
Health and Human Services**  
Here in New York City, my kids did not have a bike until they were in high school. Can you imagine that, kids not having bikes in the city? Now every member in my family has a bicycle and we ride often. Biking has become a thing to do in New York City.  
We have a huge public health epidemic nationally. If you look at the data from the 1940s and forward, you see obesity increasing. The remarkable thing is that in New York City, we have now seen that slowing, and for children, we’ve actually for the first time seen that first little notch down. We think this is a really important indicator



Deputy Commissioner  
Robert Piccolo, AIA, NYC  
Mayor's Office for People  
with Disabilities; E.  
Bruce Barrett, AIA, Vice  
President, A&E, School  
Construction Authority;  
Alex Washburn, AIA,  
Chief Urban Designer,  
NYC Department of City  
Planning; Ira Gluckman,  
AIA, Queens Borough  
Commissioner, NYC  
Department of Buildings  
Commissioner Edna Wells  
Handy, NYC Department  
of Citywide Administrative  
Services Commissioner  
Adrian Benepe, NYC  
Department of Parks &  
Recreation; Assistant  
Commissioner Wendy  
Feuer, NYC Department  
of Transportation;  
Commissioner David  
Burney, FAIA, NYC  
Department of Design  
+ Construction;  
Commissioner Thomas  
Farley, MD, MPH, NYC  
Department of Health &  
Mental Hygiene; Rick Bell,  
FAIA, Executive Director,  
AIA New York Chapter  
Credit: Center for  
Architecture



## MAYOR'S OBESITY TASK FORCE PANEL: CREATING A HEALTHIER, MORE FIT NYC

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about making the city accessible for more physical activity, reintroducing activity back into our daily lives, for our children but also in our workplaces, in retail, in the normal comings and goings of the city. The biggest impact is reducing bad calories, particularly from sugar-sweetened beverages, trying to make the decision to eat the bad stuff a little bit less automatic, less easy. The mirror half of that is to increase the ease with which you can get good stuff. So we're doing lots of things to make the healthy foods more available, from promoting our FRESH [Food Retail Expansion to Support Health] initiative, which provides incentives to build more supermarkets that sell fresh produce, to offering to put green carts out on the street in poor neighborhoods where they don't have a lot of access to cheap, affordable, nutritious fruits and vegetables, and incentivizing the use of SNAP, or Food Stamps, at farmers markets. So decreasing bad stuff, increasing good stuff, and increasing physical activity: those are really the three legs of a citywide approach to reduce the obesity epidemic.

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

People are focusing on activity now because of the obesity epidemic, but the health benefits go way beyond obesity prevention. Here's the list: heart disease prevention, stroke prevention – that is, even if you don't lose weight, if you get physically active, you reduce your risk of heart disease and stroke. Of course, you also reduce your risk of diabetes, which now kills 1,500 New Yorkers a

year and leads to 3,000 amputations per year. You reduce your risk of colon cancer, maybe breast cancer, osteoarthritis, osteoporosis, depression, and maybe the cognitive decline that happens in the elderly. It's hard to come up with a part of the body that doesn't benefit from more physical activity. If I were to put all that health benefit into a pill and sell it, I'd get the Nobel Prize. But we don't have to do that. It's free. You can do it outdoors or indoors.

In spite of that, we know that in general, we Americans are couch potatoes. About a third of American adults watch more than three hours of television a day, and we're definitely not designed to do that. And by their own acknowledgement, about a quarter of New Yorkers don't get any exercise at all. We are now doing a survey to get a better sense of how much exercise people get and where they get it. But we know now that most New Yorkers get most of their physical activity in the form of transportation. So as much as we want to promote physical activity as exercise, as leisure, or something you do as a separate task, still most of the people are getting most of their activity doing something else. I think the easiest way to take advantage of that is through the changes to our city's infrastructure so that it's easy to walk and to bicycle from one place to another. And I can't give enough Source to the different departments here today in helping to do that.

Here in New York City we've built bicycle lanes and pedestrian plazas. We've opened more parks and playgrounds where people can get exercise and as destinations to walk to. And we've



**Bicycle Parking,  
Forest Hills, Queens**  
Credit: [http://www.  
panoramio.com/  
photo/166211846](http://www.panoramio.com/photo/166211846)  
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## MAYOR'S OBESITY TASK FORCE PANEL: CREATING A HEALTHIER, MORE FIT NYC

Universal Design is the norm: it's what people do, and we really don't have to struggle with it. I feel that Active Design is following a very similar path.

opened up stairs in buildings and encouraged people to use them.

What is good design? To me, good design is not merely about making something beautiful; good design is about making something that creates positive actions and interactions among people. If that happens, then over time, that's something that will acquire its own beauty.

### **Commissioner David Burney, FAIA, NYC Department of Design + Construction**

Now that we're at Fit City 7, it's a good time to assess our progress with our campaign to design a healthier built environment. The implementation of Active Design is very reminiscent of the implementation process for the Federal Americans with Disabilities Act (ADA). Originally passed in the 1970s, it was largely ignored by designers and architects in the early days, and it was only when the Eastern Paralyzed Veterans Association in the post-Vietnam War era started litigating against projects that had not complied with ADA that

it began to really get some traction. In New York City, we passed Local Law 58, which requires city projects that go before the Buildings Department to comply with ADA. Slowly, it did begin to gain traction, to the point where architects began to realize that it wasn't just about people in wheelchairs. It was also about people pushing baby strollers, and the elderly. It was about making the city barrier-free. It became known as Universal Design.

I think we're in a situation now where, certainly in the design projects that we manage, it's barely a subject of discussion. Universal Design is the norm: it's what people do, and we really don't have to struggle with it. I feel that Active Design is following a very similar path. We started out having to proselytize, having to publish guidelines to encourage people, but I think it's becoming more and more routine now. Of course, there are lots of synergies with the original ADA, because making places barrier-free also makes them accessible and makes people more likely to use them.



**The central stairway at the New York City Department of Design and Construction on “take the stairs” day. We want to design environments where mobility is undertaken unconsciously, where physical activity is just a part of everyone's daily routine. Credit: NYC Department of Design + Construction**

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**Commissioner Adrian Benepe,  
NYC Department of Parks and Recreation**

The coincidence of public health and parks actually goes back more to the last century. Parks in the 19th century were really passive recreation places. You walked, you strolled, you were in a carriage, but there weren’t for the most part active sports facilities. It wasn’t until the turn of the century that you had playgrounds created by social workers and philanthropists. Starting on the Lower East Side, the very first municipal playground in the country, Seward Park, was started by philanthropists and social workers to give kids a safe place to play that wasn’t in the street or on a dock or someplace unsafe. In the 1930s, you saw the advent of the permanent recreation facilities – the sports fields, baseball fields, soccer fields, football fields, running tracks, and the huge, massive swimming pools that really

emphasized organized sports and gave places for people not just to have safe places to play, but safe places to really get fit.

We are in the process of a third great generation of expansion of active use and Active Design in the Parks Department, working very much hand in hand with the Department of Transportation. One of the takeaways here is, if you invest in really good recreational infrastructure, people will use it. The creation of safe bicycling paths, I think, is one of the single biggest contributions to a more livable city, but also to a fitter city, than anything else we have done. It has not been done without controversy. Since Commissioner Sadik-Khan is not here, I will praise her courage in the face of adversity, and her courage in the face of certain editorials saying that the car should be king on the streets. It has been an extraordinary transformation.

Greenways where people can walk, run, skate, and bicycle safely protected from cars provide support for active recreation and active transportation.  
Credit: NYC Parks and Recreation





## MAYOR'S OBESITY TASK FORCE PANEL: CREATING A HEALTHIER, MORE FIT NYC

### Commissioner Edna Wells Handy, NYC Department of Citywide Administrative Services

The Department of Citywide Administrative Services (DCAS) is behind almost everything in city government. We provide the people (workers), places (work space), and things (equipment and supplies) for the 150,000 city employees in over 80 agencies responsible for the quality of life for the residents, businesspeople, and visitors of the highest profile city in the world. As a world-class organization, we creatively and effectively respond to mayoral initiatives and public imperatives in a demanding climate of increased globalization, ever-changing technology, and a volatile economy.

DCAS ensures that city agencies have the critical resources and support needed to provide the best possible services to the public. We support city agencies' workforce needs in recruiting, hiring and training city employees; provide overall facilities management for more than 50 public buildings; purchase, sell and lease real property; purchase, inspect and distribute supplies and equipment; establish, audit and pay utility accounts that serve more than 4,000 buildings; and implements energy conservation programs throughout city facilities.

In line with Mayor Bloomberg's BeFitNYC "Make New York City Your Gym" initiative and the Mayor's Obesity Task Force findings and recommendations, DCAS formed a multi-agency healthy workplace committee called

"Fit City, Fit DCAS". The committee aims to facilitate and support healthy behavior with the intention of providing citywide access to proven approaches. Since forming the committee, DCAS has created two indoor walking 'tracks'; opened stairwells in 25 DCAS-managed buildings including the Municipal Building; partnered with the Department of Parks and Recreation to engage DCAS staff in regular lunchtime walks; launched DCAS volunteer-led walking clubs; encouraged workspace diversity including desk stretches, standing desks, and exercise balls; dedicated a break room for mental and physical health breaks; hosted a screening series of HBO's four-part documentary *The Weight of the Nation*; collaborated with the Department of Transportation to host a bike share site near DCAS buildings; implemented healthy catering guidelines and vending machine contents; invited the NYC Greenmarkets to provide healthy cooking instructions to DCAS staff; organized health-related educational events for staff; and collaborated with other city agencies on encouraging exercise.

### Deputy Commissioner Robert Piccolo, AIA, NYC Mayor's Office for People with Disabilities

Our office represents a segment of the population that directly benefits from the *Active Design Guidelines*. If anything, people with a disability need to avoid a sedentary lifestyle and remain active. From the very beginning, the Mayor's Office for People with Disabilities (MOPD) believed in and supported Active Design.

The NYC Department of Citywide Administrative Services, under the leadership of Commissioner Edna Wells Handy, is using Active Design strategies, such as opening up previously locked stairwells, to create healthier work environments for the City of New York workforce. Here staff is participating in the first of many walks coordinated with the Department of Parks and Recreation. Credit: NYC Department of Citywide Administrative Services





## MAYOR'S OBESITY TASK FORCE PANEL: CREATING A HEALTHIER, MORE FIT NYC



**New York City's *Inclusive Design Guidelines* supports the opportunity for an active lifestyle for people of all abilities.**  
Credit: © 2010 City of New York

The concept wasn't obvious until the publication of the *Active Design Guidelines* made it so.

The *Inclusive Design Guidelines* (2010) is actually a universal-design set of guidelines, and we knew from the beginning that both concepts were intertwined. As both publications were being written, we included each other; specifically, in the *IDG*, we have discussions about recreation routes, stairways and included things like bicycle/scooter/tricycle parking, class 1 and class 2 facilities, which didn't seem that important at the time, but now with the completion of the bicycle routes, people are concerned about where they're going to store their bikes, not just using the bikes.

Two primary environmental objectives that we typically stress are safety and usability. An active lifestyle requires an environment that helps prevent injury. This can be accomplished using a multisensory enhanced design approach that accommodates a wide range of physical and mental abilities for people of all ages. At MOPD, we don't just want to meet minimum code requirements, but to accommodate people's needs and preferences as they change and age. Active Design gives us these choices, while challenging us to increase our physical capacity. Increased usability means addressing a greater range of abilities. It's not just people with disabilities that benefit, but everybody. Active Design and Inclusive Design walk hand in hand with other important city publications that are having a systemic effect on our environment and ultimately improving our quality of life.

### Assistant Commissioner Wendy Feuer, NYC Department of Transportation

The Department of Transportation (DOT) is an operating agency and true to our mission of doing everything we can to keep people – and business – moving, we manage more than 6,300 miles of streets and highways, fill more than 200,000 potholes every year, take care of 786 bridges and manage some 1.3 million signs and over 300,000 street lights. The work we do every day pays big dividends: our bridges are in the best shape in generations and our roadways are in a state of good repair. While mobility is central to our work, safety is the foundation that our work is built on. People are not going to be active unless they feel safe, and at DOT, we're proud to say the past five years have had the fewest traffic fatalities in the city's 100 years of record keeping. To drive down fatalities and injuries, we've launched comprehensive programs that tailor streets and make them safer for everyone, especially seniors and school children. Examples include our Safe Streets for Seniors and Safe Routes to Schools campaigns, which together form the largest pedestrian-safety effort in the nation. We also target individual corridors and intersections for added safety, re-engineering them so they are more inviting for people to walk and bike.

We are working to make it better, easier and safer for New Yorkers to be active in the public right-of-way: streets, sidewalks, plazas. The NYC Plaza Program, for example, might bring to mind recent work in Times Square, Herald Square and Madison Square. However, our work transforming



***Two Wheel Transit: NYC Bike Share* exhibition at the Center for Architecture, January 2012.**  
Credit: Center for Architecture

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underutilized roadway into world-class pedestrian spaces, complete with tables and chairs and landscaping, touches all five boroughs. To date, 50 plazas are either completed, under construction or in the planning stages. And then there's the City Bench Program, which my DOT colleague, Assistant Commissioner Andrew Wiley-Schwartz, started in 2011. Ultimately we will be installing about 1,500 benches over three years. They invite people to sit when they need to. How does that factor into active design? Well, when you have an aging population, like New York City does, knowing that there's a place to take a quick breather during a walk can actually make the decision to take a walk or choose mass transit an easier one.

I want to reframe bike share for a minute. People have said to me "bike share is progressive." As cities across the globe look to extend their transportation networks, bike share just makes sense. It's efficient to get around, cost-effective to implement and for riders, biking is good for you and the planet. Bike share – whether in New York or Boston, London or anywhere – is about bringing better balance to city streets. By giving people more active options for getting around, and providing more spaces to both play and rest, we are hardcoding smarter, sustainable urban design into our city's DNA and improving the quality of life for residents now and for generations to come.

**Alexandros Washburn, AIA, Chief Urban Designer, NYC Department of City Planning**  
Active Design is about supporting people being able to walk, ride your bike, take the stairs

and eat your vegetables. It's easy to say, but it's really hard to enact. For the Food Retail Expansion to Support Health (FRESH) initiative, we worked with the NYC DOHMH to identify food deserts, places where people didn't have access to fresh fruits and vegetables. We did that using high-tech methods of geographic information system analysis. Ultimately it came down to putting it into the zoning code, which is a tremendously public procedure. To accomplish that, you go through a series of public meetings, a series of inputs at all levels of city government and from the public. Eventually it gets into law, and it has the weight of consensus behind it.

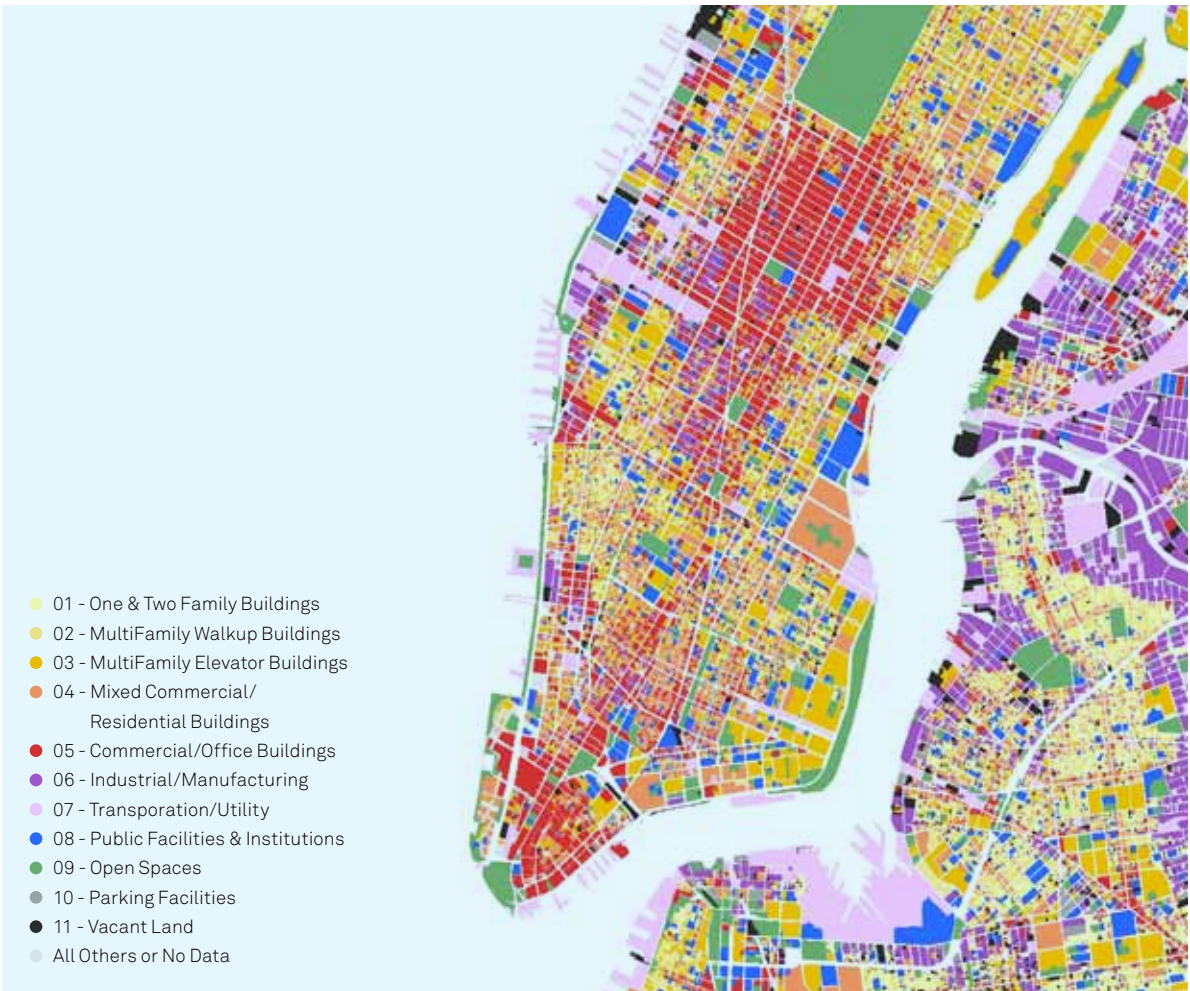
We've done front-yard regulations and we found in our studies that walking is a process: you need to provide the continuity of a varied experience. Every 10 yards, you have to have something new to look at, something new to pull you on to the next 10 yards and keep you moving. By putting in these design regulations, we ensure that the experience of walking, even in our lower-density districts, would be vital and interesting and keep you moving forward.

New access to waterfronts is coming by the rezoning of manufacturing districts into mixed-use and residential, so developers build a shore public walkway as part of their project. We did waterfront design regulations to ensure that these walkways give you a chance to walk upland, but also, once you get to the shore, have all the right design elements to make the walk along the water one of the most extraordinary experiences that you can have in New York.



**Healthy food at an outdoor market.**  
**Credit: NYC Department of City Planning**

**Urban planning policies, including zoning, can be used to create mixed-use neighborhoods where residents can access a variety of services and amenities, including healthy food within walking distance of their homes and worksites.**  
**Credit: NYC Department of City Planning**





## MAYOR'S OBESITY TASK FORCE PANEL: CREATING A HEALTHIER, MORE FIT NYC

We want to locate stairs so that they're the logical first choice for vertical circulation when you enter the building. Stairs should be presented front and center whenever possible; we're trying to move away from having an elevator as a focal point of the lobby.

A central stair in the entryway at Spruce Street School, PS 397 Manhattan, in New York City, is the primary mode of circulation for the multi-story public school. Credit: Jeffrey Kilmer @ Swanke Hayden Connell Architects

The first batch of privately owned public spaces, vestiges of a planning approach from the 1960s where buildings received bonuses for plazas, ended up being very bleak. We've been working overtime to ensure that when there is a plaza provided for the public, that that plaza has certain amenities that make it really attractive, and that it fits into the larger walking network, because there are rules about what needs to be there.

Much of what we do in Active Design is to focus on improving the quality of the public realm. As urban designers, we believe it's our job to help our colleagues find solutions for all the technical challenges facing cities. As urban designers, we believe that while we help meet those technical challenges, it's not enough. We always do it in a way that improves the quality of public life, which we take to mean the quality of public spaces.

**Ira Gluckman, AIA, Queens Borough Commissioner, NYC Department of Buildings**  
At the Department of Buildings we are working with the other agencies on ways to open up stairways. We've implemented the drinking-fountain rules where we have bottle fillers in all drinking fountains – that's a code regulation now. Also, starting in January of 2013, there's going to be a new law, local law 72 of 2011, which is filtering soot from incoming air in buildings. This will make the air cleaner and the occupants healthier.

**E. Bruce Barrett, AIA, Vice President, Architecture & Engineering, New York City School Construction Authority (SCA)**

During the past year, the SCA Green and Sustainable Design Group, in collaboration with Dr. Karen Lee and the Department of Design + Construction's (DDC) Active Design team, developed a new New York City Green Schools Guide Source, called *Active Design in a School Environment*. It will be a required Source for all new public school buildings in New York City. The Source intent is to incorporate physical activity into the daily life and routines of the school by providing opportunities for both indoor and outdoor activity.

Highlights of the Source include design for increased stair use supported by stair location, aesthetics, and signage. Most of our new schools now have a central open stair running between the first floor and either the basement or the second floor, connecting the school lobby to a public assembly space. We want to locate stairs so that they're the logical first choice for vertical circulation when you enter the building. Stairs should be presented front and center whenever possible; we're trying to move away from having the elevator as a focal point of the lobby.

Of course all of our schools have playgrounds. On some we're experimenting with using synthetic turf as a play surface (one that doesn't include recycled rubber). Where sites are too small for an on-grade playground, there are rooftop playgrounds protected on the sides and top.





## **FIT WORLD: ENCOURAGING ACTIVE DESIGN ACROSS THE GLOBE**

Unless changes are made soon in how many of our neighborhoods are constructed, the current generation will be the first in American history to live shorter lives than their parents.

The rich/poor divide.  
Credit: © Tuca Viera

Walking tracks are elements that we're trying to include in all our schools when outdoor space allows. We're also including gardens, green roofs, and vegetable gardens when space and funding permits.

**Jane E. Brody, Personal Health Columnist,  
*The New York Times***

Many other cities have a right to be jealous of what we have here in New York. Of course, developers called it progress when they built homes and shopping malls far from city centers throughout this country, but in the opinion of a growing cadre of public health specialists, the net effect was anything but progress.

For one thing, suburban and exurban developments had sounded the death knell for many downtowns, desolate areas now. But far more important for the nation's well-being, the built environment of the 20th century has become a leading cause of disability and death in the 21st century. These expanded metropolitan areas have left people completely dependent on vehicles from birth to grave. And vehicle-dependent environments foster obesity, poor health, social isolation, excessive stress and depression, not to mention the pollution that they create.

Physical activity has been programmed out of the lives of young and old alike. And many communities are now virtual food deserts, serviced only by convenience stores that stock factory-prepared, nutrient-poor foods and drinks. I recently interviewed Dr. Richard J. Jackson, chair

of the Environmental Health Sciences Department at the University of California in Los Angeles.

"Health happens in neighborhoods, not in doctors' offices," Dr. Jackson told me. In 1974, 66% of all children walked or biked to school, but by 2000, that number had dropped to 13%. Children who grow up in suburbia cannot meet their life needs without getting a ride somewhere. The average teen in suburbia says it's boring. "We have engineered physical activity out of children's lives," Dr. Jackson said. Only a quarter of the children in California can pass a basic fitness test. And two in seven volunteers for the military in this country can't get in because they're not in good enough physical condition.

Although a decade ago, urban planning was all but missing from public health concerns, a sea change has occurred, and now hundreds of papers are presented annually at the meeting of the American Public Health Association on how the built environment inhibits, or in a few cases fosters, the ability of people to be physically active and to get healthy food.

Dr. Jackson, like many others in his field, maintains that unless changes are made soon in how many of our neighborhoods are constructed, the current generation will be the first in American history to live shorter lives than their parents.

**Angela Brady, President, Royal Institute of  
British Architects**

At the London School of Economics, Ricky Burdett and his colleagues' research has produced in depth studies about cities around





## **FIT WORLD: ENCOURAGING ACTIVE DESIGN ACROSS THE GLOBE**

the world, focusing on how the design of cities impacts society, culture, and the environment. If you look at São Paulo, you can see the divide here between the rich and the poor.

I think politics shapes our cities in many ways and unless we in democratic society stand up for what we believe in – healthier cities, healthier places, and an undivided society – we won't have any say over the political decisions that are made that cause this wedge between the rich and the poor. Each of these balconies in the photograph of Sao Paulo has its own swimming pool. They don't have healthy drinking water or sanitation on the other side of this wall 10 meters away. Even in London, the further east you go for every tube stop from London Bridge, the life expectancy goes down by one year. What does that tell us about how we look after all of our people? The London Olympics Legacy plan will help to distribute investment of wealth into this newly regenerated area following the success of London 2012 Games.

Our Cities around the world are dominated by cars. In London, to reduce car numbers we have "car sharing" schemes, so people don't need to own a car, but can rent one at £5 an hour. But I believe that it is essential to invest in safe cycle routes and walkways and reduce car use altogether and the Dutch and Danes do this very well.

Street view of Amsterdam.  
Credit: © Royal Institute of  
British Architects, London

### **Peter McCue, Executive Officer, Premier's Council for Active Living, New South Wales (Sydney, Australia)**

The NSW Premier's Council for Active Living (PCAL) is an Australian interagency group comprising high level representatives from government, industry and the community sector that aims to strengthen physical and social environments to increase participation in physical activity. Residents of our outer Sydney suburbs, away from railways, drive much more than inner suburb residents. Therefore, they are less likely to be active and are at 20-30% more risk of being overweight than their inner-city counterparts. From a population perspective, we have just over half the population meeting the physical activity targets of 30 minutes of movement a day.

After giving a presentation to sustainability managers at one of the bigger developers, they informed me that our equivalent of the *Active Design Guidelines* had been built in as a compulsory requirement for all their developments across the country, and that's an example of the development industry taking a lead. From that, the concern becomes that if you need more money to buy into these urban-design places that support active living, it might increase health inequities.



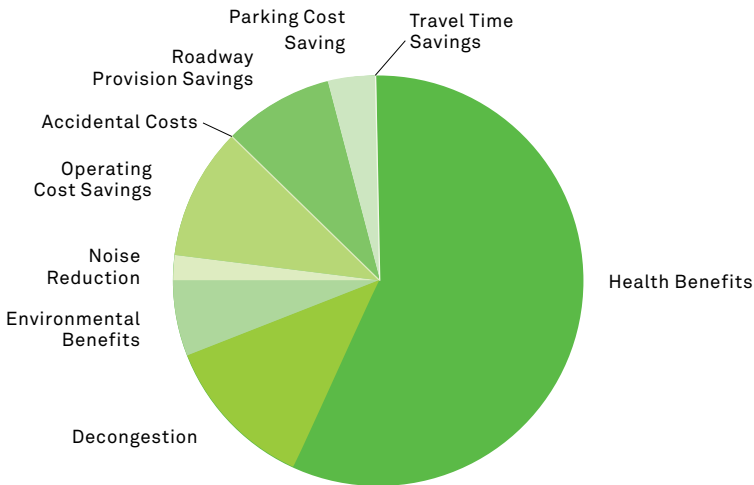
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Since the last decade, in particular in the city metro area, walking has increased, which seems to indicate that our urban identification is working; we're getting more walking for short trips. We took the opportunity to try to quantify what the financial benefits would be of taking the more than half-million, less than 1-km trips that occur each day in the city and quantify that within a cost/benefit framework. Significantly more than

half of those benefits were morbidity benefits that come from getting people out of their cars and getting them walking and cycling. Just with a 1% shift of those half million trips each year for five years, we're talking about saving over \$100 million, and then over 10 years, it's over \$200 million. So that's important, powerful information that we could take to the new government to say that this is an important area, that you can save money.

**Financial Benefits of Walking**

**5% and 10% of conversion of car trips under 1km to walking would save \$134 and \$214 million over five and ten years respectively**



**Proposed distribution of quantified financial benefits of walking demonstrating more than half the benefits of active travel are health related. Credit: PwC, 2010. Assessing the economic benefits of walking. Report for NSW Premier's Council for Active Living.**

**Kathryn Firth, MAUD, Chief of Design, London Legacy Development Corporation**

The Olympic Park site is in East London. This was part of a focus of shifting eastward, which is not just about where there is developable land, but more importantly about where something like the Olympics could act as a catalyst to regenerate East London. We inherited fantastic public transport connectivity which was key to winning the Olympics, and it has also been key to the regeneration of East London. Additionally, what is unique about where the Olympics are located is that it is part of a 26-mile-long green corridor – the Lea Valley. The Olympic site was a missing link along its length. It has been important, in thinking about where the Olympics are, how it can act as a catalyst that works at the regional scale as well as the very local scale. People use phrases such as “knitting the city back together” or “stitching the city back together” and it’s actually what we’ve been trying to do. It’s all about local and regional connectivity. If people can’t get places easily, they won’t go there in the modes that we’d like them to go there. They will get in a car and bypass these regions.

Life expectancy in the host boroughs is, on average, two years below the London average. There’s a famous set of poverty maps done by Charles Booth in 1895, and the colors haven’t changed as of 2007. The Olympic pledge – often referred to as ‘convergence’ – was that staging the Games in this part of the city would act as a regenerator. We then pair that with the mayor’s sports policy, which is all about getting people

to be more active. Our healthy living policy is about promoting community sport, both high-performance sport and local sport, as there is evidence that there is a direct link between sporting activities by lead athletes and how they then act as role models for kids. It is also important to keep in mind that the Games will pack up and go away and there is a legacy, physical, social and economic that must endure. This is more than “come in and make a quick pound”; you have to employ people from the local communities, and run programs with the local communities.

We will not charge people to use these facilities any more than they would get charged if they went to the recreation center in their neighboring borough. They need to have a role greater than just being these wonderful landmarks, and do more than just have an international event once in a while and that’s the end of it. We’re making a piece of city. Everybody in this quite deprived area has to feel like this place is their own, like they can hire bikes and go in and across the park. It must feel very open and interconnected. When we put in new libraries or community facilities, we don’t put them on the inside of the park; we put them at the perimeter, so that they are accessible to a mixed and large target group.

Looking at the morphology of London, there is a lot of permeability in the typical London block. Looking at the different housing typologies in London, we learn how important it is for the residential to frame and overlook public open



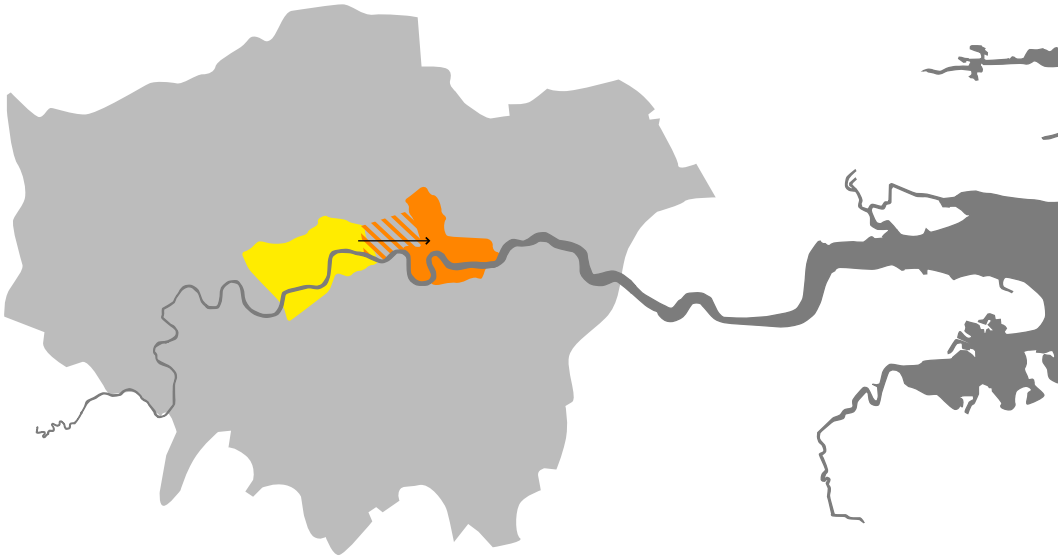
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space. The park is framed by housing, so people will feel like it's their place, a very London tradition; and illustrates this issue of "lifetime neighborhoods," providing a series of different typologies within one place. Household configurations change, but it's nice to be able to stay in the same neighborhood.

Everybody's going to have private outdoor space -we're working closely with architects to ensure we provide roof terraces, green roofs, decks, and balconies. We also must make the most of the incredible waterways that we've

inherited – towpaths along these routes; a greenway that already exists – well, we mustn't turn our back on that. Rather, it becomes integrated into the new development and takes you from Victoria Park and the canals all the way to the south to the Royal Docks. The plans recognize the importance of providing bike connections and pedestrian connections, so people feel safe and welcome.

This is the Games. And that's the future. It's all just a piece of integrated city that is accessible to everyone.



**London's Eastward Growth:** In London, Olympic infrastructure development is being used to improve active and public transportation connectivity in segregated high needs areas with Central London, as well as to increase access to these high needs areas to active recreation opportunities. Credit: Design for London

**Billie Giles-Corti, Director, McCaughey  
VicHealth Centre for Community Wellbeing,  
University of Melbourne**

We are seeing more evidence now that building supportive neighborhoods is going to make a difference – a large number of cross-sectional studies that show that if we build it, they do come. What they all show is that we need to move away from urban sprawl. We need to have more compact, convivial active living with cycling, public transport and walking infrastructure, and much less of the urban sprawl which characterizes the fringe of cities so much in Australia.

We have been working on two evaluations: the *Livable Neighborhood Guidelines* in Perth and the study evaluating these, RESIDE (the RESIDdential Environment Project); and the provision of social and affordable housing as part of the legacy of the London Olympics. The *Liveable Neighbourhood Guidelines* incorporate community design (the idea of creating walkable neighborhoods around town centers); the movement network (the provision of foot paths, cycling infrastructure, public transport options); lot layout; public parkland, a hierarchy of open space from neighborhood parks through to regional parks. We have been looking at walking, sense of community; and mental health. We survey people, put pedometers on them, and

use geographic information systems to create measures of the built environment; we audited all the public open spaces by creating a desktop audit tool using Google Street View and Google Earth. We found that for every additional type of destination, people increased their walking for transport by six minutes a week. However, for each additional type of recreational destination (a park, a sports field or the beach) people increased their walking for recreation by 21 minutes per week. What this shows is if you've got lots of destinations nearby, it's going to make a big difference to the amount of walking you do.

In London, a group of colleagues led by Chris Owen at University of London St George, is evaluating the impact of people moving into the London Olympic Village. A lot of fantastic facilities are being built – high-density housing, the aquatics village, a health center, bus routes, a new train station, a bus stop, delicatessens, supermarkets, shopping centers, safe roads, dedicated cycle paths, green space, water features, the Velopark – all located in this large public open space. The study team will be surveying 1,200 families, collecting demographic information and physical-activity data using an accelerometer, putting GPS's on people, and surveying the environment using geographic information systems.

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The new college downtown for Miami-Dade College is a multi-purpose, multi-use downtown project which has classrooms, a student union, a prominent open stair case, a fitness center, and it's immediately located next to transit. Credit: Robin Hill @ Zyscovich Architects

**Moderator: Joanna Frank, Active Design Director, Department of Design and Construction**

Before managing New York City's FRESH program, I was a developer. How is it that we prioritize these strategies above all of the other things that city governments have to spend their money on or in the private sector? How is it that we are able to persuade the development community that this is something that they should use their dollars for, that banks should underwrite, that this is the right place to spend their money?

Seventy five cents of every dollar on health care is spent on diseases that obesity directly affects. The more those families spend on health care, the less they have to spend on housing, on food, etc. This fact is absolutely entwined in the way that people are living their lives, and it's something that we need to be able to constantly refer to when we're making the case for why these strategies should be implemented at all levels.

**Bernard Zyscovich, FAIA, President and Managing Partner, Zyscovich Architects**

Here at Zyscovich Architects, we had an opportunity to begin working in the South Bronx on a project called Thessalonica, where we were first exposed to the concepts of Fit City and the responsibility of architecture to contribute to health and fitness. That's where I met Dr. Karen Lee and Joyce Lee, FAIA, and began to become indoctrinated in the advantages of what is really important about Active Design. That project, unfortunately, lost its funding. As we

began to understand that work, we also were hired more or less at the same time to do the comprehensive plan for Jacksonville, Florida, which is the largest geographic city in the United States. We began to look for places where creeks and geographic elements that could begin to connect parks actually could happen. It's almost like an archaeological process, and we began to reweave the original spaces of the city and included more parks and urban adventure locations as a way of enhancing physical fitness opportunities at an urban scale.

What I've seen happen in a lot of cities is that the way they evolve deconstructs their ecosystem. Many times the remnants of that are still there, and it's an opportunity to revitalize. A pro bono project of personal interest to me is Rickenbacker Causeway from Miami to Key Biscayne because I enjoy road cycling and that is one of the most beautiful rides in the country although not one of the safest. There are throngs of cyclists and runners, swimmers etc that use the causeway for relaxation and fitness.

I'm presenting a proposal to the City of Key Biscayne to change the corridor designation from highway to arterial since it is a state road and decreasing its designation could reduce the number of lanes and the travel speed. Sometimes you can achieve your objective by going into the classification of a roadway and using it as a way of making a park. So this is our proposal, to change it from Rickenbacker Causeway to Rickenbacker Park. That's a way of incorporating many hundreds of acres as waterfront park as an acquisition to





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By providing commuters with varied views of the city and a changing landscape, the High Line encourages active transportation.  
Credit: Francisca Sumar

the county without actually spending any money, other than fixing the roadway alignments. It's a very rich way of accomplishing a simple objective.

The new college downtown for Miami-Dade College is a multi-purpose, multi-use downtown project which not only has classrooms, a student union, and a fitness center, but it's immediately located next to transit. There's a very large area dedicated to the stairway; this stairway is 12 feet wide and goes up three stories. It's going to become a social space. In inspiration, it's very much like the recently completed Cooper Union project. As you begin to move up the building, you notice that the elevators are tucked away in the corner. The classrooms have extra-wide corridors with interaction space; you can circulate freely throughout the building.

Unlike New York and London, where Active Design is in everyone's lexicon, that hasn't really happened in much of the rest of the country. It's important to get that idea out there and receive reports where these things can really be measured and quantified, because it's going to make the case a lot stronger for all of us in being able to sell these concepts. By and large, the building code is not the friend of the "Fit City" objective; the fire marshal and the building inspectors really are by the book, as they should be, and the codes are not set up for the freedom of vertical circulation as official fire exits. The incentives need to be built into the code, and we need to make an effort as architects to push for a re- evaluation of the codes. We need to get beyond the basics of LEED, which I know that New York

City has done, but the rest of the country has not. And in addition to the obvious health benefits of fitness, these ideas determine whether urban or architectural interventions always end up making better architecture and more livable cities.

**Andrea Platt Dwyer, Executive Director, Seattle Tilth and Regional Food Policy Council Member**

The built environment is a very important component of physical fitness. Another essential part of the equation is the food we eat. Making sure that people have access to fresh, healthy produce is crucial to ensure personal and community health. Seattle Tilth works to inspire and educate people to grow and eat organic food in a way that protects our environment and builds an equitable and sustainable local food system. We were founded in 1978, and have a budget of \$1.6 million. We have a staff of twenty-seven and rely on 1,500 volunteers to help us do what we do every year by providing more than 20,000 hours of service. We operate seven learning gardens and three farms in the Seattle area. We've published two books, and we touch about 45,000 people annually.

Throughout most of history, the majority of people lived in a more rural environment, and depended on agriculture and hunting for survival. One hundred years ago, only 3% of the world's population lived in urban centers. Fifty years ago, that number jumped to about 30%. In 2008, we were at 50/50, and by 2050, it is projected that 70% of us will live in cities. In the US, we're already past that point, with about 80% of living in urban





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centers. Furthermore, while 80% of us live in cities, only about 20% of our food is coming from those cities. The food we eat has also changed dramatically in the last century. Industrial methods in agriculture, chemical inputs, and the livestock industry have dramatically increased our yield of food, but with hidden costs – obesity, diabetes, and other diet-related diseases.

Urban agriculture comes in several shapes and sizes. It can take place on public land or private land. The land can be owned or leased. Food can be grown by homeowners, students, volunteers, or employees. In terms of scale, it can be grown through commercial food production, in a community garden, in a backyard garden, or even in a set of containers on the balcony. There is no one-size-fits-all. Growing food has other health benefits: it is a relatively simple activity that can be learned and practiced by people of all ages or abilities, which may be one reason why it's the second most popular physical activity, outside of walking. Those who engage in gardening spend on average about four hours a week gardening, vs. two and a half walking.

So how are we incorporating this into Seattle, which is a densely built city? Our city occupies a total area of about 142 square miles. Of that, only 84 square miles are land. The rest, about 41%, is water. We have very little vacant land – less than 4% of Seattle is vacant – but we do have a couple of things going for us. We're the sixth most walkable city in the country, and we rank ninth in food and agriculture sustainability ratings. Like most large cities, Seattle has its share of

challenges when it comes to ensuring a healthy and equitable food system. Scarcity of land and high real estate values put the cost of land for large urban gardens or farms out of reach.

Seattle is responding to these challenges in a number of ways. In 2010, the Department of Planning and Development incorporated a healthy living assessment into the neighborhood planning process. Seattle is developing a municipal agriculture program by assessing city-owned land and determining its suitability for leasing to people interested in commercial food production. And Seattle's Office of Economic Development participated in the Healthy Foods Here Program, which provided financial support for small corner-store owners who wanted to retrofit their stores so they could offer fresh produce. In 2010, Seattle declared the Year of Urban Agriculture, making several changes to city code. We allow urban farms up to 4,000 square feet with no requirement for a land-use permit. We increased the number of chickens that a homeowner could keep from three to eight. We allow beekeeping, up to three small animals, such as miniature goats, and food production in parking strips, as long as certain visibility and height requirements are met. We also give rooftop greenhouses an exception to height limits, up to 15 feet, as long as that greenhouse is being used for food production. We also began mandatory food waste recycling.

Food-growing sites in urban spaces need to be within easy walking distance of where people live. They need to include covered gathering spaces and spaces for people to sit and relax. Water for

This bike path along the Hudson River Greenway offers a safe and active form of moving around the city. Credit: Francisca Sumar





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irrigation is essential, as are bathrooms. Access to organic matter such as compost ensures the ongoing health of the soil. And art enhances community gardens tremendously.

**Alison Cohen, President, Alta Bicycle Share**  
Things are moving very fast with bike share in New York City. Bike sharing really started in Europe, and the first systems in the U.S. started in 2010 in Minneapolis and Denver. Then Alta Bicycle Share launched the Washington, DC program Capital Bikeshare, which is still the largest one in the country. We also started Melbourne, Australia's program. After the summer of 2010, cities around the U.S. said, "Wow, this is working." Bikes aren't getting stolen, people aren't getting into accidents, everybody is not getting sued, and people are using it. And this is a really comparatively low-cost way of introducing a completely new transit system to the city.

New York City did a feasibility study in 2008, led by the Department of Transportation, and decided that we wanted to get the rough stuff out of the system and take the best of all the different systems. The equipment we're using here is manufactured by Public Bike System (PBSC). Alta Bicycle Share oversees the employees on the street, the bike mechanics, rebalancers, and customer service center, the front-facing part of the system working closely with PBSC. The first PBSC system, Bixi (for bicycle taxi), was the first solar-powered system in the world. This was another reason for the proliferation of these systems, and it was the one requirement in the

New York City RFP, that excavation could not happen. So we go from a sidewalk or a street spot to a station in one hour. There's a solar panel and a heavy steel technical platform; the station is not anchored to the sidewalk. Everything you see, from the bikes to the stations, needs proprietary tools. The whole thing was designed as one, so you won't see any cables outside in the bicycles. People cannot steal parts of the bikes or parts of the station, and they cannot move these things.

For the New York system, they'll have GPS, so we're actually going to know routes of where everybody has traveled. We get all sorts of amazing ridership data: annual membership, daily membership, number of trips that people have taken. The data is going to be owned by DOT. I know they have a very open data policy, so there's going to be a lot of amazing stuff for people to analyze. In DC, 75% of our trips are by members, and 25% by tourists; in Boston, it's roughly 50/50, and I think that's because of the different footprint of the system. We expect it to be more like 50/50 here. The pricing structure is you get a free period, either 30 or 45 minutes, and almost all of the member trips are below that free period. As a member, a person who lives in the city using bike share, it is truly the cheapest way to get around. Visitors typically are not as price-sensitive and may go beyond that free period. Then we get information about rides per day of the week and by hour of the day: on the weekdays we get a peak around rush hours, and on weekends we get this bell curve in the middle of the day.

The major sponsor for the New York City system is Citibank. We are creating a public transportation system without a penny of cost to taxpayers. I can't say I believe this model is replicable in every city, but this is the biggest media market in the world. The annual membership is \$95 a year, and we expect New Yorkers to purchase that membership. For tourist usage, you can walk up and swipe a Source card; for daily membership it's \$9.95. It's not meant to compete with bike rental. Our safety record

in our other systems is very strong. We just hit 2 million rides for Capital Bikeshare, and we've had on the order of 17 crashes, I believe. All of our systems have some low-income programs. We are working with the New York City Housing Authority to offer a discounted membership for every single resident, and we're also working with community Source unions to help provide a way for people without Source cards to get into the system. Used correctly, this system is absolutely the cheapest way to get around.

**The Hudson River  
Greenway facilitates  
active transportation in  
New York City.  
Credit: Francisca Sumar**



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The first of five addenda to the *Active Design Guidelines – Active Design Supplement: Promoting Safety* – was published in 2012. Credit: NYC Department of Transportation

**Karen Lee, MD, MHSc, FRCPC, Built Environment and Active Design Director, NYC Department of Health and Mental Hygiene**

There will be five addendum documents to the *Active Design Guidelines*. First, there is *Promoting Safety*, based on the findings of a study done in conjunction with the Bloomberg School of Public Health at Johns Hopkins University and the Society for Public Health Education (SOPHE). Additional documents include *Affordable Designs for Affordable Housing*, *Shaping the Sidewalk Experience* and *Opportunities in Zoning*. New York City’s Department of City Planning, working with the DOHMH and funded by the CDC, was able to visit multiple cities in the U.S. to start to catalogue the best zoning practices for Active Design across the country.

Finally, there’s *Active Design Guidelines for the Lower Density Environments*. This is being created because over the past couple of years, New York City, with funding from the CDC, has been mentoring 14 other U.S. communities. One of the things that came up was the need to address Active Design not only in a very urban context,

but also in the suburban context. In the suburban environment, where connectivity of sidewalks and streets may be more limited, there may be opportunities to encourage pedestrian easement and walkways through some existing blocks. There may also be opportunities to revitalize existing centers of commerce with mixtures of retail, small businesses, services, and even multi-residential buildings for an aging population. They can start as hubs for more walkability and bicycling in more suburban areas.

Similarly, on promoting safety, as we expect, the review of the scientific literature shows that many of the Active Design strategies synergize nicely with increasing safety. For example, complete streets are not only good for Active Design but also increase safety of pedestrians, cyclists, motorists, and transit riders. Street calming similarly has strong evidence for increasing the safety of bicyclists and pedestrians and is a key part of Active Design. And similarly, in the building realm, issues like lighting in stairways and hallways can not only promote use of those spaces for physical activity, but also enhance the safety of the building and the work site.

**Skye Duncan, MsAUD, Associate Urban Designer, NYC Department of City Planning**

We would like to introduce the idea of the sidewalk room, a concept we have used to shape the entire *Active Design Supplement: Shaping the Sidewalk Experience* study that will be released in 2013. A sidewalk room has four planes: a ground plane, a roadside plane, a roof plane, and a building-wall plane. We’ve been following three parallel streams of research: one is about the sidewalk experience, what it’s like to inhabit the space; two, how that is in turn shaped by the physical space itself; and three, how that physical space is regulated by a series of policies.

A lot of people think about sidewalks in plan or in section, in a two-dimensional way. But that’s really not how you ever experience a sidewalk. You’re in the space in real time. And so we’ve really talked about this idea of extruding and hence building this idea of the room. So it’s really a spatial condition that we’re thinking about. And given the sidewalk experience, we’ve come up with seven key contributing factors, making sure that, regardless of your context, it’s safe 24 hours a day for people to use it. It must be sustainable, taking into account local weather conditions as well as materials and storm water management. It needs continuous variety and a continuity of experiences that pulls people down the sidewalk. It should be connected, so that it doesn’t dead-end in the middle of nowhere. It must be accessible for all different users. It must deal with human scale and complexity.

If it’s a building and there’s a street wall, we think about the lower couple of floors. And if it’s set back, we think about what’s in that front-yard area. We also want to acknowledge that there’s not just one type of great sidewalk experience. There are lower-density areas, and there are higher density areas. It can be quiet and green. It might be busy and orderly. Sometimes it’s the more messy and dynamic sidewalks that become the most interesting. Sometimes sidewalks become destinations in themselves.

The first scale is neighborhood context: if you’re in a gridded city, it’s very different from a suburban context. But we want you to start thinking about the destinations. Where are people walking to and from? Who are the different users who might be using this? The second scale is about immediate adjacency – more like the right of way. One of the big things we noticed here was whether sidewalks had a street wall or whether the buildings were set back. With those considerations, sidewalks exist in a huge variety of different densities. We’ve focused on three different key sidewalk typologies: in a downtown commercial area, a neighborhood main street, and a residential only. Within each of these, the immediate adjacency, we talk about understanding some of the key metrics. What is the overall height of the buildings? How wide is the right of way? What is the use on the ground floor? What’s the roadside adjacency? What’s happening right next to you? Is there parking? Is it fast traffic? Is it a bike lane? If the building is set back, how far?



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Now, if we think about each of the four planes of this sidewalk room, the ground plane is what most people typically consider the sidewalk. This is typically under the jurisdiction of transportation agencies around the country. All these different physical elements contribute to that plane, everything from street furniture, lighting, green strips, whether there is service access (or in New York’s case, subway grates), and the overall width and the slope and all of these things contribute to the ground plane. On the roadside plane, we have everything from the rhythm of the street trees and the street lighting to the street furniture and the roadside adjacency. Are there cars parked there? The roof plane is not something we typically think about when we think about sidewalks, but this has a big role. How much sky are we seeing? Are we experiencing tree canopies? What’s the height of the buildings? What’s sticking off the buildings? What’s overhanging the sidewalk? Are there balconies, lighting, signage, fire escapes, and so forth?

On the building-wall side, this is where we have a lot of control. As architects and designers, I would argue probably anyone here who has designed a building has actually contributed to designing a sidewalk experience. Obviously there’s a huge array of policies that help shape a city, and many different city agencies. With the focus on zoning, we started to break down and say, “OK, what’s within our policy toolkit?” We can incentivize certain things, mandate a practice, or

update our codes that were written half a century ago and remove impediments. Cities can share and copy each other; obviously they’re going to adapt the metrics to make it appropriate for their local conditions. We have a chapter that’s about action steps: how to understand that your sidewalk is part of the larger context; how to think about the type of pedestrian experience that you think is appropriate; how to break down the physical elements or policies to be shaped; and finally looking at how you can encourage policy changes if that’s what is needed. It goes back to these three parallel streams: the policies that have created the physical space, which in turn informs the experience of the pedestrian.

We have created not only a catalog of the different zoning policies that relate to sidewalks, but developed a set of tools to enable you to go and measure your own sidewalks. Our hope is that these tools will assist policy makers, designers and citizens in advocating for the pedestrian experience through knowledge sharing and collaboration. That it will be used as a guide or reference when designing new communities or buildings, when thinking about alternative transportation access, when planting trees on sidewalks, when narrowing roadbeds, or when there are no existing sidewalks at all. We aim to encourage sidewalk rooms that promote diversity in their use and a healthy active lifestyle for their citizens, while informing new policies and processes along the way.

**Key contributing factors to a great sidewalk experience.**  
Credit: Skye Duncan



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*The Active Design Supplement titled Affordable Design for Affordable Housing will be published in 2013.*  
**Credit: Bernstein Associates, courtesy of Blue Sea Development Company**

**Gayle Nicoll, PhD, Dean of the Faculty of Design, OCAD University**  
Our research team received funding from the Robert Wood Johnson Foundation to examine the design and cost issues of integrating Active Design, particularly strategies that would increase physical activity for young people between the ages of 3-18. The research team, comprised of academic and professional architects, student researchers, health professionals, private and public housing providers developed a partnership with multiple academic partners and chose 11 case studies in New York City, Atlanta, and San Antonio to give us some geographic variance and a variety of housing typologies from urban to suburban. The developer partners, all leaders in providing high quality affordable housing, selected buildings that had been designed in the last five years for the design teams to assess the opportunities for physical activity in the original designs and to propose an alternative design based on *Active Design Guideline* strategies. We looked at where we could integrate features that would support physical activity for children, youth, and their families and what the cost difference between the existing project design and the new Active Design would be.

In our case studies, we redistributed the resources attached to things that were sedentary or underutilized for those that were more likely to promote physical activity. We enhanced existing features that can increase physical activity with low cost; we found synergies between other program requirements, such as sustainability and

accessibility. We found that the differences in cost for adding or reconfiguring to include Active Design features come to 0.5% to 1.6% of total construction costs across the 11 case studies. Yes, in some case studies you can actually even achieve cost savings! There are also a variety of housing agency standards and regulations, and tax Source agency regulations that play a role in how physical activity opportunities are provided. For example, some tax Source programs require the provision of a tot lot for children under six years of age, but there are no requirements to provide facilities for adolescents or teenagers.

One New York case study is an eight-story residential building in a dense urban neighborhood. It's already fairly progressive in that it has a play space with playground equipment, an open space, and exterior bike racks. What we suggested was to put a path around the outside to allow very small children in tricycles and Big Wheels to be able to maneuver around the backyard area. Also, by shifting the location of the lobby, the community room, and the laundry in the designs, we were able to capture space from the corridor and add a small interior fitness room (important in a climate like New York, where you have a portion of the year where the outdoor courtyard would not be quite as usable). We reversed the orientation of the staircase to bump out into the lobby to promote stair visibility and use.

In another New York example, we suggested creating a challenge path for the passively programmed outdoor courtyard, with different sort of features that children could climb around,

step, jump, and maneuver around. The developers of this project really liked this idea.

San Antonio is a very auto-dependent city, and this particular project is located next to a fairly major interstate highway, a classic “Texas doughnut” design – a parking garage with housing designed around it. You can actually drive up right to your level and walk into the public corridor and then into your unit – not necessarily the best for Active Design, but one that actually is very popular in auto-dependent environments. We suggested that perhaps they might think about having a more adult side and a more family-oriented side, flipping the building to have the courtyard facing the residential community and provide active child spaces within the development.

**Running near Pier 62 – New York City's waterfront offers many opportunities for exercise and active recreation.**  
**Credit: Francisca Sumar**







Commissioner David Burney, FAIA, NYC Department of Design + Construction. Credit: Center for Architecture

Summary:

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

The role of leadership came up several times during the day, along with the integration of Universal Design, Active Design, and Sustainability, and synergies between all those things. Bruce Barrett of SCA had, I thought, a very important idea about getting kids off to a good start, getting them active right from the beginning. Angela Brady from the RIBA introduced the theme of equity: the high correlation between income inequality and health disparity. I think as designers and public officials, we really need to bear that in mind.

Peter McCue from New South Wales had a very interesting presentation on the way in which they had united transportation, aging, and health planning in their Premier's Council for Active Living. And he reinforced the idea of the importance of leadership. They have a single-payer health system, so there was a lot of convergence on their activities there. And they have started doing cost-benefit analysis, and shown the incremental cost savings over time.

Kathryn Firth from London Legacy Development Corporation focused on the London Olympic development and their attempt to address the issue of income, health and equality with the development they're doing. I thought it was a very interesting example of Active Design embedded in an entire new urban development. And it will be interesting to see Billie Giles-Corti's follow-up study of the Olympics. She talked about the evaluation: longitudinal studies over an eight-year period, finding out not only what works but what doesn't work.

Bernard Zyscovich, our real working architect, is at the grassroots actually implementing Active Design, and he gave us some very interesting examples of projects that he's working on in Miami, throughout Florida, and in the South Bronx – and about how the building Codes and Active Design are not necessarily always sympathetic, and they should be. Andrea Platt Dwyer from Seattle Tilth brought us the food side of the equation. Gardening is not just about the diet. There are physical and mental health benefits of gardening. And she reinforced the importance of learning about food production, especially for children

And then from Dr. Karen Lee's panel on the five new *Active Design* supplements that are coming out, we heard a lot about the affordable costs of many Active Design strategies in the affordable housing projects that Gayle presented, and we got a sneak preview of Skye Duncan's brilliant sidewalk design supplement.

There is much that has been accomplished, and I am excited at the prospect of the progress we will make in the coming year, especially when we open the Center for Active Design. Organized by an inter-disciplinary partnership

among New York City agencies, AIA New York City, private sector architects and developers, and academic partners, the Center will seek to reduce obesity and chronic diseases. This will be achieved by promoting physical activity and healthy eating through the design of buildings, streets, and neighborhoods. The Center will work to communicate best practices, share and support research and emerging design trends and convene practitioners across disciplines through conferences, trainings, workshops and technical assistance initiatives.

We are facing – and we need to remind ourselves of this – a major seismic shift in political landscape. Four out of the five borough presidents will change in the next election. The Mayor will change, the Public Advocate, and more than half the City Council. It's probably the most profound political changeover the city has ever seen. And it's incumbent upon us, and you, and those people who care about the built landscape and accessible design, who care about designing for fitness and environmental sustainability, to let those people know who are running for office, who want to represent us going forward, that this continues to be a priority.

Robert Piccolo, AIA, from panel Q&A sections

## RESOURCES

### Active Design Guidelines

<http://www.nyc.gov/adg>

### Active Design Supplement: Promoting Safety

<http://centerforactivedesign.org/promotingsafety>

### AIANY/DOHMH Fit City publications

<http://www.aiany.org/fitcity1>; <http://www.aiany.org/fitcity2>; <http://www.aiany.org/fitcity3>; <http://www.aiany.org/fitcity4>; <http://www.aiany.org/fitcity5>; <http://www.aiany.org/fitcity6>; <http://www.aiany.org/fitcity7>

### AIANY/DOHMH Fit Nation publications

<http://www.aiany.org/fitnationdc>; <http://www.aiany.org/fitnationnola>

### PlaNYC 2030

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

### American Institute of Architects, New York Chapter (AIANY)

<http://www.aiany.org>

### New York City Department of Health and Mental Hygiene (DOHMH)

<http://www.nyc.gov/health>

### New York City Department of Design + Construction (DDC)

<http://www.nyc.gov/ddc>

### New York City Department of City Planning (DCP)

<http://www.nyc.gov/dcp>

### New York City Department of Transportation (DOT)

<http://www.nyc.gov/dot>

### New York City Department of Parks and Recreation

<http://www.nycgovparks.org/>

### New York City Department of Buildings (DOB)

<http://www.nyc.gov/html/dob>

### New York City Department of Citywide Administrative Services (DCAS)

<http://www.nyc.gov/html/dcas>

### New York City School Construction Authority (SCA)

<http://www.nyc.gov/html/sca/>

### New York City Mayor's Office for People with Disabilities (MOPD)

<http://www.nyc.gov/html/mopd>

### U.S. Centers for Disease Control and Prevention

<http://www.cdc.gov>

### 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>

### Jane Brody, *New York Times*

[http://topics.nytimes.com/topics/reference/timestopics/people/b/jane\\_e\\_brody/index.html](http://topics.nytimes.com/topics/reference/timestopics/people/b/jane_e_brody/index.html)

### Jane Brody, personal site

<http://www.janebrody.net/>

### Hong Kong: Cities, Health, and Well-being, London School of Economics

<http://lsecities.net/publications/conference-newspapers/hong-kong/>

### Royal Institute of British Architects

<http://www.architecture.com>

### McCaughey Centre, University of Melbourne

<http://mccaugheycentre.unimelb.edu.au>

### RESidential Environment Study (RESIDE), University of Western Australia

<http://www.sph.uwa.edu.au/research/cbeh/projects/reside>

### Premier's Council for Active Living, New South Wales

<http://www.pcal.nsw.gov.au>

### London Legacy Development Corporation

<http://www.londonlegacy.co.uk>

### Thessalonica Gardens, Zyscovich Architects

<http://www.zyscovich.com/project.cfm?pid=409>

### Seattle Tilth

<http://seattletilth.org>

### Citibike

<http://www.citibikenyc.com>

### Alta Bicycle Share

<http://www.altabicycleshare.com>

### Faculty of Design, Ontario College of Art and Design (OCAD University)

<http://www.ocadu.ca/Page935.aspx>

### Via Verde

<http://viaverdenyc.com/>

### Zyscovich Architects

<http://www.zyscovich.com/>

## CREDITS & CITATIONS

### Fit City 7 Report prepared

by: **American Institute of Architects, New York Chapter**

**Rick Bell**, FAIA, Executive Director

**Laura Trimble Elbogen**, Director of Marketing

**Daniel Fox**, M.S., Communications Director

**William B. Millard**, PhD, Independent Editorial Consultant

**Julie Trébault**, M.S., M.A., Partnership Programs Coordinator

### Acknowledgements:

#### NYC Department of Health and Mental Hygiene

**Thomas Farley**, MD, MPH, Commissioner

**Karen K. Lee**, MD, MHSc, FRCP, Built Environment and Active Design Director

**Sean I. Robin**, MCP | Director, Built Environment & Healthy Housing

**Maggie Veatch**, Deputy Director, Built Environment & Healthy Housing

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

### Fit City 7 Conference

#### Speakers, May 21, 2012

**Joseph J. Aliotta**, AIA, LEED AP, President, AIA New York Chapter

**Karen K. Lee**, MD, MHSc, FRCP, Built Environment and Active Design Director, NYC Department of Health and Mental Hygiene

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

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

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

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

**Wendy Feuer**, Assistant Commissioner, NYC Department of Transportation

**Adrian Benepe**, Commissioner, NYC Department of Parks and Recreation

**Edna Wells Handy**, Commissioner, NYC Department of Citywide Administrative Services

**Robert Piccolo**, AIA, Deputy Commissioner, NYC Mayor's Office for People with Disabilities

**Alexandros Washburn**, AIA, Chief Urban Designer, NYC Department of City Planning

**Ira Gluckman**, AIA, Queens Borough Commissioner, NYC Department of Buildings

**E. Bruce Barrett**, AIA, Vice President, Architecture & Engineering, NYC School Construction Authority

**Monica Roberts and Lillian Dunn**, NYC Department of Health and Mental Hygiene (leaders, Physical Activity Break)

**Jane E. Brody**, Personal Health Columnist, The New York Times

**Angela Brady**, President of the Royal Institute of British Architects

**Peter McCue**, Executive Officer, Premier's Council for Active Living, NSW (Sydney, Australia)

**Kathryn Firth**, MAUD, Chief of Design, London Legacy Development Corporation

**Billie Giles-Corti**, Director, McCaughey Centre, University of Melbourne

**Joanna Frank**, Active Design Director, Department of Design + Construction

**Bernard Zyscovich**, FAIA, President and Managing Partner, Zyscovich Architects

**Andrea Platt Dwyer**, Executive Director, Seattle Tilth and Regional Food Policy Council Member

**Alison Cohen**, President, Alta Bicycle Share

**Skye Duncan**, MsAUD, Associate Urban Designer, Department of City Planning

**Gayle Nicoll**, PhD, Dean of the Faculty of Design, OCAD University



**AIA New York | Center for Architecture**  
**536 LaGuardia Place**  
**New York, NY 10012**  
**[www.aiany.org](http://www.aiany.org)**