designing a...
healthy LA

Gensler

Acknowledgement

City of Los Angeles

Bill Roschen, President, City Planning Commission

Simon Pastucha, Urban Design Studio, City Planning Department

Gensler

Andrew Turco

Brian Glodney

Claudia Carol

Connie Chauv

Meghan Moran

The authors received helpful input from a number of sources used for background research and previous work completed on the subject. Special thanks to the numerous health advocates and design practitioners who unknowingly contributed to this document.

Foreword

Bill Roschen, President, City of Los Angeles Planning Commission

Design professionals and civic leaders, with the support of the public they serve, have the responsibility to ensure that our City of Los Angeles positively contributes to our individual and collective health. There is a long history of the powerful and direct connection between the design of cities and public health. Just as previous epochs have had health epidemics characterized by communicable diseases to overcome; we are faced with conquering chronic disease due to the inactivity and poor nutritional habits plaguing our residents, resulting in some of the highest rates of obesity and diabetes to date. Leading a healthy lifestyle is no longer a luxury afforded by the few, but a necessity and right to each individual who calls Los Angeles home.

Over the last few years, the L.A. City Planning Commission and Planning Department in collaboration with L.A. County Department of Public Health, Community Health Councils, and the California Endowment, have embarked on a mission to ensure that our built environment and the policies that guide our decision makers, designers, and developers hold well-being and healthy lifestyles as fundamental to our shared future. Prioritizing this objective in our land-use planning, our policies, and the way we collectively value health in our communities will spur a collective dialogue that very well may create a true cultural shift, one that prioritizes the creation of healthy environments, thereby acting as a positive influence on all we do as residents, professionals, and community members.

Designing a Healthy LA is a first step towards improving health outcomes by adapting the City of Los Angeles's physical environment. The primary aim of this perspective-shifting document is to outline broad topics and provide best practices to accomplish this objective. While many documents, including this one, focus on increased physical activity and nutritious eating habits, ***Designing a Healthy LA*** also recognizes that a key component in creating a healthy City is fostering community kinship, identity, and cohesiveness. ***Designing a Healthy LA*** should be viewed as a primer that better defines the relationship between health and urban design, one that will be supported by future policies and documents such as the future Health & Wellness chapter in the General Plan Framework Element that is currently in development, as part of the larger General Plan to create an improved civic environment..

Ultimately, a purposeful, focused response to our current health epidemics will leave the City of Los Angeles and its residents and businesses with the platform and tools necessary to establish a healthier community and culture for the foreseeable future.

designing a... healthy LA

What's inside

Introduction

Creating a healthy city is an ambitious goal, but achievable through a shared commitment by all those who live and work in Los Angeles. ***Designing a Healthy LA*** addresses the potential of the physical environment to positively contribute to significant improvements in the health and well-being of our residents. This document targets specific strategies addressing the way we move, the way we eat, and the way we think about our communities - strategies that affect the design of our streets, buildings and neighborhoods, all in relation to our personal health and the overall well-being of our city.

Historically, there exists a strong relationship between the design of our cities and public health. Outbreaks of communicable diseases common in earlier centuries were alleviated by regulations affecting the design of cities and buildings. Improvements to sanitation systems and requirements for ventilation in buildings, among others, significantly reduced epidemics of cholera and tuberculosis of the late 19th and early 20th centuries. These advances in public health that reduced the consequences of those infectious disease have been replaced during the 21st century by a different epidemic – a significant rise in the percentage of adults living with chronic health conditions such as obesity and diabetes.

"The way we design and build our communities can affect our physical and mental health"[1]

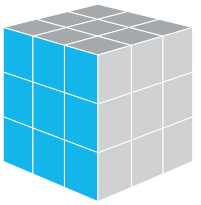
"The 2005 Los Angeles County Health Survey (LACHS) show that the prevalence of adult obesity in the county continues to increase, with 1 out of every 5 adults in the county now obese. Obesity increases a person's risk of developing many other chronic conditions and of dying prematurely. Adults who are obese are more likely to have diabetes, heart disease, arthritis, asthma, hypertension, high cholesterol, and depression. Obesity is also associated with poorer quality of life and higher medical costs. Excess body weight among adults is estimated to cost the U.S. more than $90 billion per year in healthcare costs."[2]

The public health concerns of the 21st century will require new approaches to wellness, both environmental and personal. Reordering priorities and addressing the current public health epidemic of obesity and associated chronic diseases as a direct result of lifestyle and planning decisions, is part of a changing social dynamic and is the impetus of the recommendations of this document. These recommendations provide for improved health outcomes for all Los Angelenos with a broad and inclusive range of influences on overall wellness. The series of interrelated design improvements to our physical environment following, are aimed at increasing physical activity, providing wider access to healthy food choices, elevating air and water quality and strengthening the quality of kinship and community that respond to public health concerns. These recommendations are at the foundation of ***Designing a Healthy LA***.

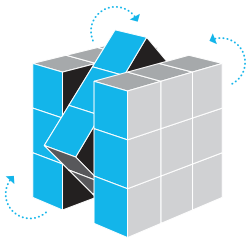
Designing a Healthy LA is intended for those responsible for the planning, design and construction of our City and its open spaces, buildings, streets, and neighborhoods. It presents fundamental information on opportunities and strategies for planning and design decisions that directly affect health, while recognizing the great diversity of cultures, physical settings, and differing needs of Los Angelenos.

A broad range of guidelines addressing the physical environment, often requiring minimal intervention and costs, are provided in the following pages. Optimally, as many relevant recommended strategies as possible should be incorporated into each project. The more strategies are utilized, the greater the project's potential impact on health. Significant documentation exists on the beneficial aspects of environmental design on health outcomes and it is these evidence-based design strategies that are the basis for the recommendations in ***Designing a Healthy LA***.

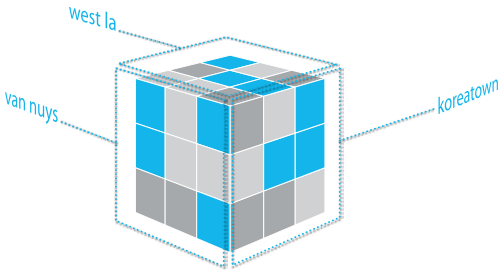
Health is a shared responsibility and a pursuit for all of us – not just the health department or medical community. Prioritizing a healthier city and people through the choices we make in designing our communities results in a better, more equitable quality of life for all the residents of Los Angeles.



designing a...
healthy LA



customizing a...
healthy LA



creating ...
healthy LA neighborhoods

designing a healthy LA...

provides a compendium of strategies that are meant to be customized and tailored to fit each unique neighborhood within Los Angeles.

Purpose

It is an imperative to address the critical lifestyle changes that are necessary in addressing the growing epidemic of obesity and related chronic diseases. There is documented evidence that the design of the urban environment - our streets, buildings, and cities - is intrinsically connected to solving these chronic illnesses as well as improving our quality of life and, therefore, our physical and mental well-being. ***Designing a Healthy LA*** provides a platform communicating the importance of focusing on changes in the built environment affecting individual lifestyles and improving overall community health.

The emphasis of this document is on recommendations that affect the physical design of the City, while recognizing that changes in health outcomes are also dependent on medical advances, economics, and programs supporting changing healthcare practices and improved lifestyles. Many urban environments include a variety of the strategies depicted and are at the forefront in implementing healthy community design. Other strategies described are innovations supported by research in various fields. The use of evidence-based design helps to reinforce design choices that provide positive impacts to health and well-being. The implementation of a broad range of these strategies over a variety of urban design and architectural projects can contribute significantly toward reducing obesity and supporting healthier lifestyles.

"Health is a state of well-being and the capability to function in the face of changing circumstances."[3]

Designing a Healthy LA provides an introduction to the importance of healthy cities and consolidates a process for potential implementable solutions to physical improvements. It can be used as a foundation for discussion by planners, elected officials, educators, design professionals, developers, community leaders and private citizens to promote healthy design in public and private projects.

The pragmatic implementation of the recommendations in this document and their integration with the City's development policy and standards is critical to their success. They are meant to be compatible with the Health & Wellness chapter in the General Plan Framework Element, complement existing guidelines such as Urban Design Principles and Walkability Checklist, as well as provide a framework for future detailed guidelines that prioritize health, ensuring the future well-being of our City and its residents.

The goal of ***Designing a Healthy LA*** is to make the City of Los Angeles an even greater place to live, work and play by creating an environment that enables residents and visitors to embrace a healthy lifestyle.

Organization

Designing a Healthy LA provides an overview on designing a healthy environment by identifying a series of broad topics that include a range of strategies to support personal health. The document can be easily browsed for an overview of the systems: ***a healthy LA... is active***, ***a healthy LA... eats well***, and ***a healthy LA... is a community***, that includes evidence-based strategies addressing a range of improvements that can improve health in the diverse communities that make up Los Angeles. Some strategies are more general or provide a wide-ranging solution, while others are specific to a need or are focused on one aspect of a health issue. At the conclusion of the document, a summary of the relationship between strategies illustrates the impact of each on the many components comprising a healthy city.

"Health is, therefore, a positive concept emphasizing social and personal resources as well as physical capabilities."[3]

a healthy LA...

...is active

Places and spaces encouraging people to incorporate physical activity into daily routines is fundamental to the creation of a healthy L.A.. ***Designing a Healthy LA*** requires a shift from single-passenger vehicles to multiple modes of mobility, including rail, bus, bikes, and walking. Transit is considered an active form of transportation as users often walk to and from transit stops, completing the "last mile". A system of walking and bicycling paths and multi-modal transit options encourage and allows for increased movement, independent of the car, throughout Los Angeles and increases the vibrancy of the City and the health of its residents.

In addition to personal and mass transit options, increased access to varied forms of open space is also shown to increase levels of activity, leading to improved health outcomes. Los Angeles' varied neighborhoods need to accommodate diverse users and activities with a range of scales and types of open spaces, encouraging physical activity for people of all ages and abilities.

...eats well

Types, amount, and availability of healthy food is just as important in promoting healthier lifestyles and combating chronic disease as is increased physical activity. Currently, there simply are not enough healthy food outlets and places growing and selling nutritious foods to serve the varied neighborhoods of Los Angeles.

Providing locally produced, nutritious foods positively impacts personal health and well-being. Urban gardens can provide broader advantages - boosting the local economy and improving communities by bettering environmental quality. Cultivating and consuming locally grown food can ensure a high level of food quality, take advantage of L.A.'s climatic advantages and reinforce healthy eating behaviors.

...is a community

A healthy community includes equitable access to education, housing, jobs, the ability to live without fear of violence, freedom from environmental hazards, and a meaningful built environment. The design of our communities is critical to the health of Los Angelenos, both their physical and mental well-being.

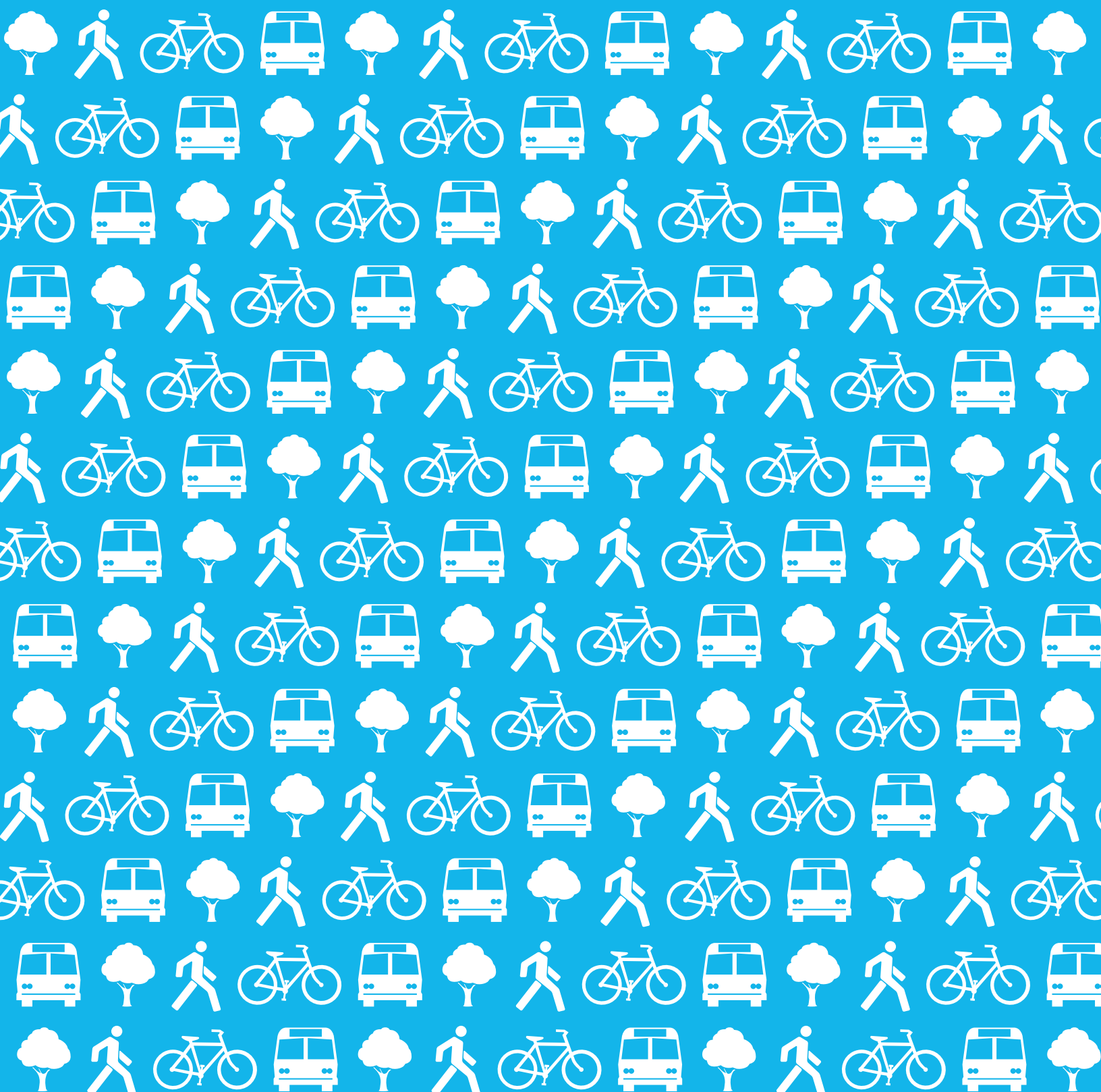
Building design can easily promote a more active lifestyle. The organization of a building and the visibility of stairs are a simple way to increase daily physical activity. Embracing universal design increases accessibility for all people, with and without disabilities.

Placemaking is at the heart of a community and critical to individual stability and well-being. A well designed urban environment can elevate our quality of life and result in a cleaner, more active, and socially connected Los Angeles.

impact snapshot

	...is active	...eats well	...is a community
Walkability • *sidewalks* • *pedestrian amenities* • *visual interest*	 Primary Impact	 Tertiary Impact	 Secondary Impact
Bikeability • *bike networks* • *safe bike routes* • *bike parking*	 Primary Impact	 Tertiary Impact	 Secondary Impact
Active Transit • *transit stops* • *land use* • *multi-modal transportation*	 Primary Impact	 Tertiary Impact	 Secondary Impact
Public Open Space • *complete streets, alternative infrastructure & plazas* • *parks* • *natural recreation areas*	 Primary Impact	 Secondary Impact	 Tertiary Impact
Locally Produced Food • *community agriculture* • *urban agriculture* • *demonstration & educational gardens*	 Tertiary Impact	 Primary Impact	 Secondary Impact
Access to Nutritious Food • *retail food* • *alternative food outlets*	 Tertiary Impact	 Primary Impact	 Secondary Impact
Social Capital • *community participation* • *identity* • *safety*	 Secondary Impact	 Tertiary Impact	 Primary Impact
Clean Environment • *air* • *water* • *land*	 Secondary Impact	 Secondary Impact	 Primary Impact
Built Environment • *density nodes* • *architectural design*	 Primary Impact	 Primary Impact	 Primary Impact

a healthy LA



...is active

Walkability

Bikeability

Active Transit

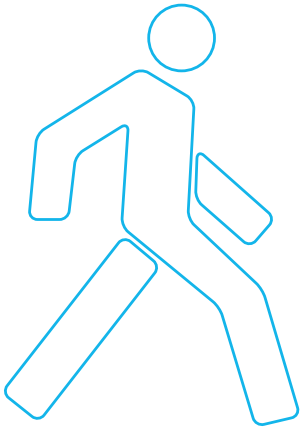
Public Open Space

Places and spaces encouraging people to incorporate physical activity into daily routines is fundamental to the creation of a healthy Los Angeles. "Physical inactivity is a primary contributor to one-third of the adult population being overweight or obese and one in six children and adolescents being obese."[4] Changes towards a healthier lifestyle are most successful when they require a minimum effort by the individual. The healthy choice needs to be the easy choice. Active environments are those that enable and encourage physical activity as integral components of daily life.

Designing a Healthy LA requires a shift from the current primary mobility mode, single-passenger vehicles, to favoring multiple modes of mobility, including rail, bus, bikes, and walking. Transit is considered an active form of transportation as users often walk to and from transit stops, completing the "last mile". Creating pedestrian and bike-friendly environments encourage mobility that is both physically active and environmentally friendly. Each of these alternatives to the car increase opportunities for active behavior in our daily lives.

The creation of alternative connections within neighborhoods and throughout the City provides increased accessibility and links for pedestrians and bicyclists serving to further their effectiveness. Both directness and multiplicity of routes makes active forms of transportation more useful, minimizing the amount of time spent in private vehicles. A system of walking and bicycling paths along with multi-modal transit options encourages and allows for increased movement, independent of the car, throughout Los Angeles and increases the vibrancy of the City and the health of its residents.

In addition to personal and mass transit options, increased access to varied forms of open space is also shown to increase levels of activity, leading to improved health outcomes. For city-dwellers, parks, public spaces, and even streets and sidewalks can provide opportunities for play, recreation, and exercise. "Physical activity really is a wonder drug. It makes you healthier and happier, you live longer, you have a lower risk of heart attack and stroke, high blood pressure and high cholesterol, a lower risk of diabetes, and cancer... and depression."[5] Los Angeles' varied neighborhoods need to accommodate diverse users and activities with a range of scales and types of open spaces, encouraging physical activity for people of all ages and abilities.



Walkability

Walking is the most readily available and ubiquitous form of exercise in Los Angeles – it is available to all people of all ages and with a wide span of ability. Even short but frequent walks have been shown to increase fitness, thereby positively impacting health through reductions in obesity and lowering levels of chronic disease. A walkable city is one in which it is easy for residents, users, and visitors to effortlessly and pleasantly walk to a variety of destinations. Walkability requires a range of strategies that consider human scale, pedestrian comfort, safety, and land use as well as respond to the specific physical and cultural characteristics of each neighborhood. Further detailed recommendations on creating walkable neighborhoods can be found in the *City of Los Angeles Walkability Checklist* in addition to the recommendations in this report.

13% of kids

Only 13 percent of children walk or bike to school, compared with 44 percent a generation ago[6]

a 1 km walk

Walking one kilometer (just over a half-mile) every day can reduce your odds of obesity by five percent[7]

100 cal/mi

A 150-pound person will burn roughly 100 calories per mile of walking. Walking 2 miles each way to the office 5 days a week equals to 1 thousand calories you don't have to sweat off on the treadmill[8]

Sidewalks *Sidewalks provide for a safe pedestrian mobility route.*

- Provide an interconnected, continuous sidewalk network.
- Appropriately size sidewalks for pedestrian flow that is specific to the needs of the adjacent land use, street and neighborhood.
- Make walking more convenient by implementing shorter blocks with frequent crossings, allowing quick connections between pedestrian destinations.
- Use traffic calming measures and minimize curb cuts to create safe streets for pedestrians.

Pedestrian amenities *Pedestrian amenities create a pedestrian friendly environment.*

- Create a consistent rhythm of amenities that enliven pedestrian paths.
- Provide benches, especially important for older adults or others who may require rests at frequent intervals.
- Provide closely planted shade-producing street trees that increase pedestrian comfort.
- Utilize pedestrian lighting and signage to improve security and aid wayfinding.

Visual interest *Visual interest promotes pedestrian activity.*

- Use human scale elements to create visual interest and a comfortable pedestrian environment.
- Place primary building entrances along the sidewalk to encourage pedestrian activity.
- Provide transparent windows at the first floor to create a relationship between the building and street, improving neighborhood character and the pedestrian environment.

Seating, landscape features, and other amenities increase pedestrian comfort *{Solingen, Germany}*

Enhanced paving provides visual interest and delineates linkages *{Alicante, Spain}*

Walkways can be landmarks and encourage use *{Benidorm, Spain}*

Physical buffers provide safety from car traffic *{New York, NY}*

Shared streets increase pedestrian access, interaction, and safety *{Brighton, UK}*

Street trees provide shade visual interest *{Los Angeles, CA}*

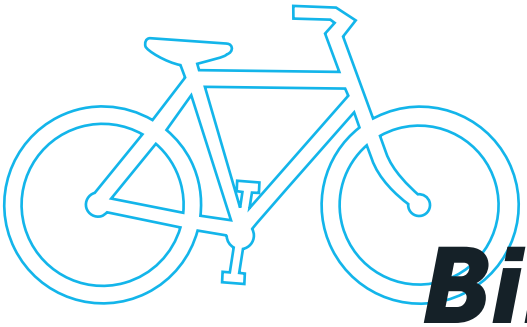
Crosswalks and intersections with integrated lighting increase pedestrian safety at night *{New York, NY}*

Pedestrian scrambles increase access and convenience while creating safer crossing opportunities *{London, UK}*

Why This Matters To...

YOU Walking reduces the incidence of obesity and chronic disease through incorporating exercise in daily routines.

L.A. An increase in distances walked significantly improves air quality, reduces injuries due to automobile related accidents and boosts community interaction.



Bikeability

Biking is an active alternative to traveling by car, and is especially practical in the advantageous climate of Los Angeles. It is economically more feasible than car ownership, yet extends the range beyond which it is practical to walk, and provides as many similar benefits as increased walkability. Safer, convenient, and pleasant bike routes encourage bicycle travel to be incorporated into daily routines. A well-articulated bikeway network with high quality end-of-trip facilities is necessary to make biking a feasible alternative to the car. A one-mile distance can be covered by a five-minute bicycle ride, increasing the useability and convenience of bicycle-based transit. Just as a five- or ten-minute walk is considered convenient and enjoyable for the pedestrian, a relative amount of time and distance of supporting uses should be planned for bicycle destinations and amenities. Bikeability is increasingly effective if a connection to transit is available, establishing true connectivity between neighborhoods. Connecting destinations and providing bike amenities throughout the City contribute to a bike-friendly environment.

48% less

Adolescents who participate in bicycling, skating, or skateboarding more than four times a week are 48 percent less likely to be overweight as adults.[9]

5mi/30min

The average speed of a car in city traffic is less than 15 miles per hour. But with an average speed of 10 to 20 miles per hour, an experienced cyclist can make a 5-mile commute in 15 to 30 minutes - it's just as quick as driving, but has the extra bonus of fresh air and exercise! [10]

Bike Networks *Bike networks can be comprised of a variety of types of bike paths for the different conditions needed throughout Los Angeles.*

- Provide continuous and connected bike routes.
- Utilize a variety of bikeway types appropriate to the specific urban context. These may include shared-use paths, sharrows, bicycle boulevards, bicycle lanes, and physically separated bicycle lanes—sometimes called cycle tracks.

Safe Bike Routes *Safer bike routes attract more users and limit injuries.*

- Configure bike routes to accommodate the least confident user.
- Utilize physical buffers between bikes and vehicles when possible, especially at major arterials, to increase the safety of riders.

Bike parking *Bike parking should should accommodate long-term and short-term use.*

- Place short-term bike parking prominently and locate close to associated destinations, ideally within 25 feet of a main entrance.
- Allow bicyclist to use different locking mechanisms.
- Shelter bike parking from weather elements when possible.
- Provide secure bike storage and bike parking at building and transit entrances to increase bicycle usage as a primary mode of transportation.
- Include changing rooms, lockers, and showers at long-term bike parking, transit stations, and places of employment.
- Include theft prevention strategies at long-term bike parking.

Separate, dedicated bike lanes and walkways eliminate conflicts between pedestrian and bicyclists *{Bogota, Colombia}*

Bike parking can be accommodated in many configurations *{Palo Alto, CA}*

Dedicated, on-street bike lanes maintain vehicular traffic patterns while encouraging biking as an alternate travel mode *{Los Angeles, CA}*

Sheltered bike parking provides protection from weather, a secure place to store bikes, and for minor repair opportunities *{Washington, DC}*

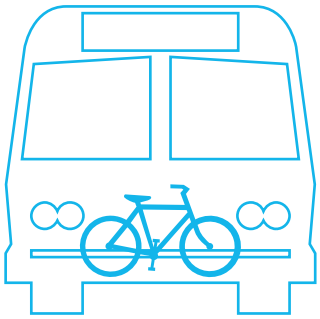
Bikeshare programs bolster bike usage by providing convenient access and low cost options *{London, UK}*

Environmental graphics and wayfinding support bike use and aid navigation *{Lisboa, Portugal}*

Why This Matters To...

YOU Cycling just 15 minutes twice a day can burn the equivalent of more than 10 pounds annually.

L.A. Bicycling, as an alternate to driving, lowers fossil fuel use and CO2 emissions, thereby reducing air pollution, positively impacting individual health and the environment.



Active Transit

The typical transit trip involves a short walk or bike ride to and from the station and positively reaffirms habits of car independence. This directly links the role of active transit in increasing riders' physical activity and its inclusion in ***Designing a Healthy LA***. The ability of transit stations to successfully integrate with surrounding land uses supports densification of the adjacent area while benefiting the environment and the notion of community, in addition to increasing physical activity. Encouraging the use of transit requires well-routed and frequent service, convenient stops, and linkages with other transportation modes. The directness and multiplicity of routes makes active forms of transit more attractive to users, while the development around and adjacent to transit stations provides economic benefits, revitalizes neighborhoods, and can become the center for an active and connected community.

8x safer

Riding a bus is about 8 times safer than traveling by car. Taking the train or light rail is 40 times safer than driving... The number of deaths per 100 million miles traveled by car is 0.79, by commuter railroad 0.02, and by transit bus 0.01.[11]

1 hour/day

Every additional hour spent in a car each day increases chances of obesity by 6 percent.[12]

Transit Stops *Transit stops incorporating adequate facilities ensure that the user has a positive experience.*

- Incorporate weather protection and seating at transit stops.
- Utilize signage that supports wayfinding and transit use.

Land Use *Appropriate land use and activity supporting transit bolsters functionality.*

- Encourage convenience and service-oriented retail that can be supported by transit users.
- Plan residential uses within a ½ mile of a transit stop to encourage people to live in transit-oriented districts.
- Enhance the immediate station environment to attract additional riders.
- Support transit-oriented development within an easy walk of major transit stops, with a mix of high- to mid-density residential, employment, and retail.

Multi-Modal Transportation *Strengthening the relationship and connectivity between multiple modes of transportation increases its functionality.*

- Provide bicycle and pedestrian amenities for "last mile" transit users.
- Provide strong connections from transit to road networks by sidewalks and bike paths.
- Create pedestrian friendly destinations within ¼ mile of transit stations.
- Transparent windows at the first floor, and creating a relationship between building and street, improving neighborhood character and the pedestrian environment.

Station design enhances transit visibility *{Adelaide, Australia}*

Multi-modal transportation options increase transit usability *{Stuttgart, Germany}*

Designated transit lanes increases accessibility, visibility and safety *{Madrid, Spain}*

Seating and roof coverings provide user comfort at bus shelters and protect from weather and noise *{Castellon, Spain}*

Bus mounted bike racks provide mode flexibility *{Los Angeles, CA}*

Green infrastructure at transit stops can enhance the environment {*Sheffield, England}*

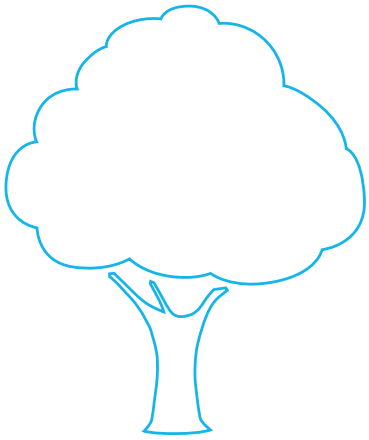
Public transit supports pedestrian activity in commercial districts without the effects of heavy vehicular traffic *{New York, NY}*

Mode specific transit stations increase efficiency of passenger loading allowing for reduced overall transit times {*Curitiba, Brazil}*

Why This Matters To...

YOU Regularly relying on public transit increases walking, improves health, provides greater access to a wide variety of destinations and integrates the user into the community.

L.A. The use of mass transit is sustainable, revitalizes communities and provides economic benefits to the users.



Public Open Space

Public open space provides places for people to experience nature, engage in physical activity, and relax. When people have access to public open space, there is an increased likelihood that they will engage in physical activity, building a strong correlation between proximate open space and overall individual health. Within the city's total land area, 8% is dedicated to open space acreage - well below the median of 10.3% for the densest of US cities.[14] Parks provide one of the most recognizable opportunities for outdoor recreation with L.A.'s unsurpassed natural environment - the ocean, mountains, and rivers - as the other primary asset. The City's streets and sidewalks also form a large percentage of the City's open space. Utilizing all of these elements to create useable, accessible open space offers opportunities for mental and physical respite, active recreation, and a variety of environmental and associated health benefits.

Proximity

Proximity to parks and other recreational facilities is consistently associated with higher levels of physical activity and healthier weight status among youth and adults.[12]

2.5x

Young teens (ages 12 to 15) are 2.5 times more likely to report walking if there is recreational open space within one kilometer (just over a 1/2 mile) of their home.[13]

Complete Streets, Alternative Infrastructure, and Plazas *Streets and parking lots encompass a significant portion of land and can be an important contribution to the health of L.A.. These areas can be added to our usable open space rather than devoted exclusively to the automobile.*

- Repurpose on-street parking spaces as parklets, areas for public use.
- Stripe parking lots for recreational uses during off-peak hours.
- Create pocket parks at abandoned rights-of-way.
- Design plazas that allow for diverse functions and users.

Parks *Parks increase physical fitness by providing access to sports and recreation opportunities. They improve mental health by providing a connection to nature and community facilities.*

- Create parks on underutilized public land.
- Provide a range of sizes and types of parks allowing a variety of passive and active activities, such as meditation gardens, recreational sports, individual fitness and children's playgrounds.
- Respond to the needs of different users such as varying age groups, cultural preferences or various L.A. neighborhoods.
- Create parks within walking distance of residential uses so that they are more likely to be used by neighbors.
- Increase visibility and accessibility of parks so they are safer and more child-friendly.
- Co-locate schools and playground play spaces so that they are mutually beneficial to schools and neighborhoods.

Natural Recreation Areas *The rich, natural environment of L.A. plays an important role in connecting residents with nature, allowing participation in specialized physical activities such as hiking, skiing or surfing. These resources are a unique local asset.*

- Provide public transit to natural recreation areas.
- Preserve and restore the natural integrity of the mountains, beaches and rivers.

Active playgrounds improve physical fitness and encourage community interaction *{London, UK}*

Indoor facilities provide active play opportunities *{London, UK}*

Parks provide landscaped areas for peace and physical and mental relaxation *{New York, NY}*

Retrofitted under-utilized streets can be transformed to provide open spaces in urban environments *{Los Angeles, CA}*

Visual interest attracts users to open spaces while providing vibrant and safe routes to destinations *{Tel Aviv, Israel}*

Parklets are mobile, relatively low cost, and can provide open space opportunities where excess roadways may exist *{Los Angeles, CA}*

Unique open space design can transform into an active playground, like a parkour course *{Måløv, Denmark}*

Why This Matters To...

YOU Close proximity and regular use of landscape areas is associated with decreased levels of depression, anxiety, and other mental and physical health problems.

L.A. A diversity of open space areas provides a range of sports and activities for Los Angelenos bolstering levels of fitness and emotional well-being.

a healthy LA

...eats well

Locally Produced Food

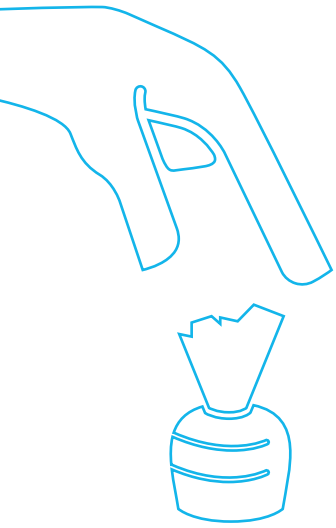
Access to Nutritious Foods

The types, amount, and availability of healthy food is just as important in promoting healthier lifestyles and combating chronic disease as is increased physical activity. For many families, the consumption of too many cheap calories and too little exercise has caused a diabetes and obesity epidemic."[16] Compounding the impact of cheap calories and reduced amounts of exercise is the fact that there simply are not enough healthy food outlets and places growing and selling nutritious foods to serve the varied neighborhoods of Los Angeles.

"Within a 200 mile landward radius of Los Angeles is a remarkable abundance of incredible food. California leads the country in agricultural exports, particularly of fruits, vegetables and nuts... yet, it appears that only 1% of the food grown so close to us, is actually consumed here."[17] "Southern California is one of the most abundant and productive agricultural regions in the nation, yet Los Angeles has a hunger crisis that dwarfs most US cities. Indeed, Los Angeles is the "epicenter of hunger."[18]

Providing locally produced, nutritious foods positively impacts personal health and well-being. Health benefits are provided by engaging in the physical activity to create gardens and cultivate crops. Urban gardens can provide broader advantages - boosting the local economy and improving communities by bettering air, water, and land quality through reductions in travel and shipping distances and revitalizing vacant or underutilized areas. Another key component of healthy eating includes fresh food options at retail markets. In areas where healthy food is difficult to come by, mobile markets, farmer's markets, and food vendors can provide access to fresh and healthy local produce.

Those economic and environmental benefits directly affect individual health as does the increased nutritional value of fresh food. Cultivating and consuming locally grown food can ensure a high level of food quality, take advantage of L.A.'s climatic advantages, and reinforce healthy eating behaviors.



Locally-Produced Food

Studies have shown that the places in which we live and work directly influence how and what we eat. Inserting small-scale urban agriculture and community gardens into the urban environment is one way in which L.A. can increase its local food production giving Angelenos more options in deciding what to eat as well as a more reliable level of food security for the City. In almost all L.A. neighborhoods, land is available for small-scale community gardens. These gardens can also serve as learning opportunities and as centers for healthy neighborhood activities. In the most urban of environments, innovative urban farmers are utilizing rooftops and front yards. Schools, public parks, and libraries, for instance, can more than produce food; they are also appropriate locations for demonstration and educational gardens for community residents and visitors. Food producing sites need not all be the same. In fact, the type and intensity of food producing places should be tailored to each individual community, better responding to local conditions, cultures and dietary needs.

$12 billion

In 2006, Los Angeles County spent $12 billion on health care costs and lost productivity associated with obesity and physical inactivity.[19]

1 in 7 jobs

The food system accounts for one out of every seven jobs in Los Angeles County. If calculated as an industry, it would be the largest employer in the County.[20]

Community Agriculture *Community agriculture can be incorporated by varying mechanisms appropriate to each neighborhood.*

- Provide publicly accessible areas for community gardens.
- Utilize parkways and other available public spaces for gardens.
- Encourage front yard and back yard gardens on residential properties.
- Encourage habitat cultivation and restoration.

Urban Agriculture *Urban agriculture and small commercial scale farms are potential food sources throughout the City.*

- Utilizing available land in urban areas for agriculture provides an economic boost through job creation, makes fresh food available locally, and reduces dependence on outside food sources.
- Urban agriculture may be provided by small- to mid-sized farms, hydroponic/technology assisted operations or in the form of building retrofits.
- Locate gardens on nontraditional areas such as rooftops and decks.

Demonstration and educational gardens *Gardens can serve as a model of local growing potential and value.*

- Learning Gardens and Farms foster interaction and physical activity as well as exposure to agricultural cultivation methods and fresh food.
- Provide demonstration/educational gardens for schools, libraries and other institutions providing the public opportunities to learn about growing techniques and preparation methods.

Signage in community gardens provide educational and community art opportunities *{Brooklyn, NY}*

Community farming builds relationships *{Chicago, IL}*

Beekeeping is popular in urban garden settings *{Chicago, IL}*

Disused alleyways and courtyards can provide food growing opportunities *{Paris, France}*

Utilize available land in urban areas for community gardens and urban agriculture *{Vancouver, Canada}*

Technology assisted farms can provide high-yield produce where land is scarce *{New York, NY}*

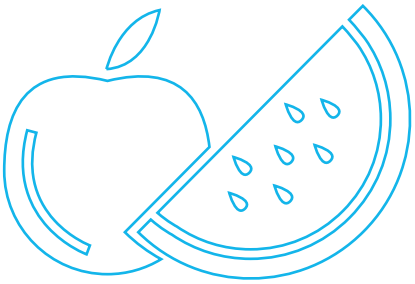
Publicly accessible fruit trees are abundant in Los Angeles and provide a source of nutritious food *{Los Angeles, CA}*

Nontraditional elements, such as street parkways, can be used as food-growing opportunities *{Seattle, Washington}*

Why This Matters To...

YOU Replacing consumption of cheap calories associated with high-sugar, packaged foods with locally produced, nutritious options reduces the odds of obesity and other chronic diseases.

L.A. Local agriculture contributes to a stronger economic base and benefits the environment.



Access to Nutritious Foods

An increase in availability and access to healthy food opportunities is vital to improved eating habits and healthier lifestyles. Just as in food production, food access is accommodated by a range of scales and formats. The proximity, location, and number of healthy food outlets is directly associated with the amount of healthy foods consumed. This relationship is especially magnified in transit-dependent neighborhoods where access is typically limited to walking and biking distances. Research also clearly indicates that proximity to full service supermarkets is associated with lower obesity, yet access to fruits, vegetables, and other healthy foods is limited in many urban neighborhoods, particularly in low-income communities.[23]

Healthy food access opportunities can vary greatly, from traditional retail markets, to mobile markets, to street vendors and farmers' markets. Increasing the amount of healthy food access points can provide the fundamental elements needed for a healthy diet. Environmental benefits are realized by a reduction of vehicle miles traveled to and from points of purchase and economic gains are provided by an increase in local job opportunities. These increase the health advantages of local access to nutritious food.

56 miles

Local food purchases reduce vehicle trip miles from an average of 1,500 miles to 56 miles, benefiting the environment and the local economy. [21]

1/2 of food dollars

Americans spend about half their food dollars on meals eaten away from home. [22]

Retail Food *Varied retail food outlets provide convenient points of access and consumption of healthy foods oriented to a neighborhood scale.*

- Encourage the establishment of small markets and shops selling healthy foods.
- Support the establishment of restaurants serving healthy food options rather than typical fast food outlets.

Alternative food outlets *A variety of food outlets provides opportunities for non-conventional food access and supports smaller, local growers.*

- Farmers' markets provide direct farm-to-plate opportunities where local producers can interact with consumers and provide food options tailored to local customs and cultures.
- Mobile markets and vendors are best utilized where underserved or access-inhibited communities exist, providing a much needed fresh food outlet without the needed infrastructure or large amount of capital typical of traditional retail formats.

Mobile markets bring nutritious food to access-inhibited communities *{Amsterdam, Netherlands}*

Farmers markets provide farm-to-table fresh food opportunities *{Olympia, WA}*

Non-traditional produce delivery increases access to healthy food *{Boston, MA}*

Community-based delivery methods can be utilized in food-deserts *{Boston, MA}*

Food warehouses and distribution centers supply fresh food to communities and stabilize the food supply *{Atlanta, GA}*

Retail markets provide a wide variety of healthy produce options *{Portland, OR}*

Farmers' markets encourage direct interaction between farmers and consumers enabling access to fresh food *{Hollywood, CA}*

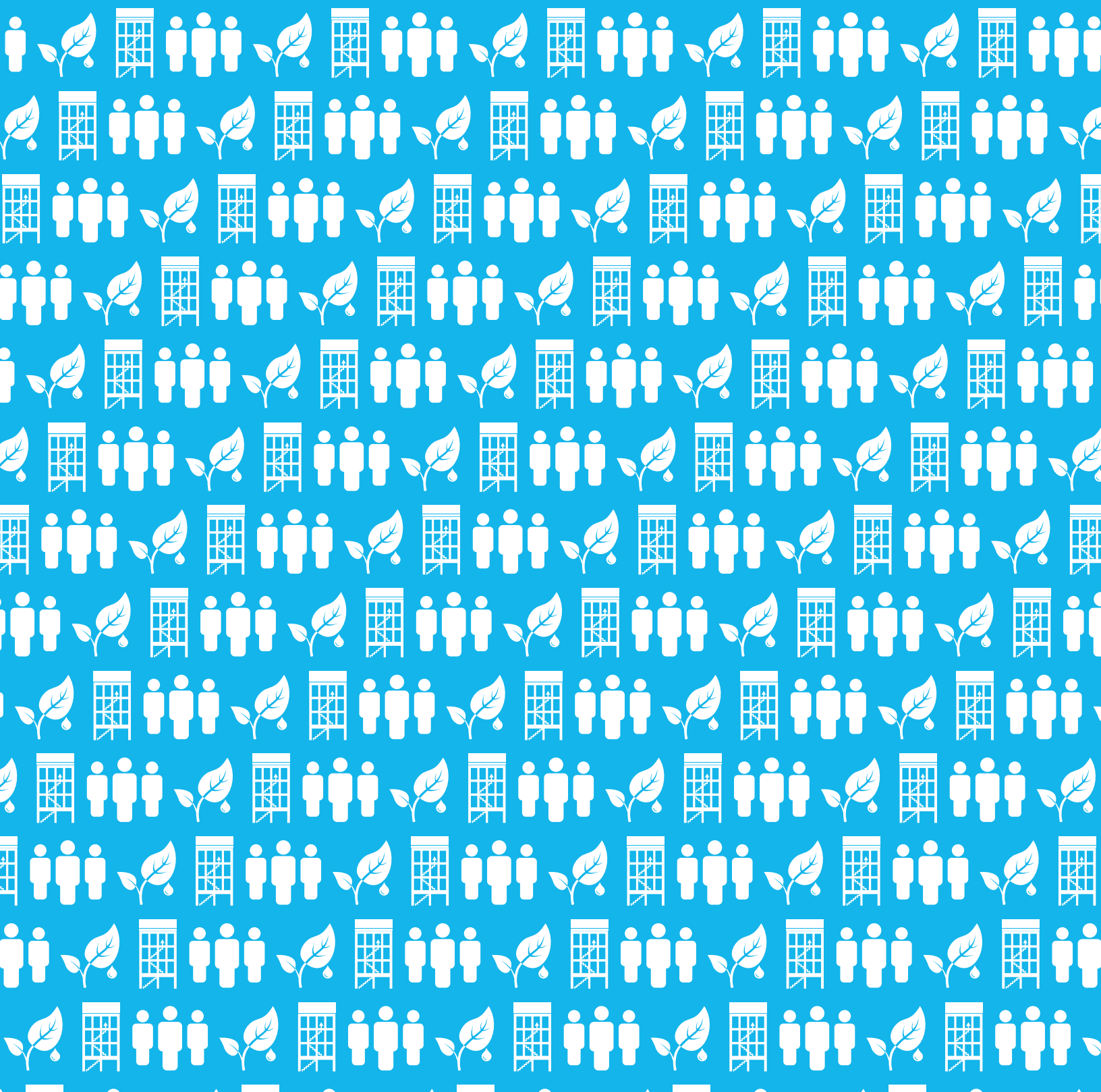
Community based markets can provide culturally specific food and produce *{Istanbul, Turkey}*

Why This Matters To...

YOU Increased access to healthy food can reduce hunger and lessen obesity due to poor nutrition.

L.A. Cost savings associated with healthier diets and reduced chronic diseases can potentially save the City over $600 million over 5 years. [24]

a healthy LA



...is a community

Social Capital

Clean Environment

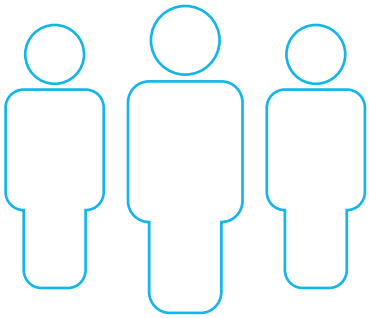
Built Environment

A healthy community, in both its social and physical aspects, is one that offers access to physical activity and nutritious food. It must also provide additional contributions to individual wellness, including equitable access to education, housing, jobs, the ability to live without fear of violence, freedom from environmental hazards, and a meaningful built environment.

The design of our communities is critical to the creation of a healthy Los Angeles. The relationship between physical activity, health and the built environment is intuitive and well understood. Mental well-being, in addition to physical health, is also a critically important consideration impacted by the physical environment. "Depression and mental illness contribute a substantial burden on public health and should be treated with the same urgency as physical health."[25] The organization of our communities and the design of the built environment can positively support emotional and social well-being.

Building design can easily promote one aspect of healthy design - a more active lifestyle. The organization of a building and the use of a stairway as a visible and accessible element are simple ways to increase daily physical activity. Embracing universal design makes buildings, products, and environments equally accessible to all people, with and without disabilities. Supporting increased access by making streets, open spaces, and facilities universally accessible enables improved physical activity opportunities among people with disabilities possible.

Placemaking is at the heart of a community and critical to individual stability and well-being It is a complex concept that includes the creation of community identity, common facilities, a relationship between urban dwellers and nature, and necessitates well-designed buildings and neighborhoods. These elements of our urban environment are the building blocks of strong, healthy neighborhood and provide the foundation for community kinship. Together, these elements can elevate our quality of life and result in a cleaner, more active, and socially connected Los Angeles.



Social Capital

Social capital refers to the worth of our social networks and acknowledges a shared investment in our neighborhoods and city. In contrast to the measurable benefits from physical improvements to the urban environment, it is more difficult to quantify results from these strategies that are broader in scope. "Lack of social contact increases risk of chronic stress, heart disease, and other illness. People with the weakest social ties have significantly higher death rates, possibly as great as three times higher than those who are socially integrated. Although many other forces contribute to social isolation, city design is increasingly blamed. Segregated land uses and building design, inadequate public transportation, the demise of centers that provide locally accessible services, and loss of places to exercise all contribute to alienation. For many, especially the elderly, lack of physical access is one of factor leading to illness and often death."[28] However, places with distinctive identities and that are well designed contribute to a sense of belonging and pride. They are places where people know their neighbors and are where residents have a communal stake in the overall safety and success of their neighborhoods.

Strong social network

Connected and walkable neighborhoods have stronger social networks than car-dependent neighborhoods, thereby increasing its social capital. [26]

Trust more

People living in walkable neighborhoods trust neighbors more, participate in community projects more, and volunteer more than in non-walkable areas.[27]

Community Participation *Personal investment by residents through volunteering and participation in community events creates a stronger social fabric.*

- Incorporate community outreach in the public and development process resulting in social investment.
- Encourage participation in neighborhood councils to provide informed local knowledge to Developers, City officials, and staff.
- Incorporate community buildings and open spaces providing a place for socializing and connecting.
- Utilize targeted environmental signage, universally accessible streets, paths, open space and facilities allowing increased activity among people with disabilities.

Identity *Perception of neighborhoods, buildings and open spaces generate community identity.*

- Celebrate the unique spirit, culture, and values of neighborhoods through urban design.
- Create focal points by the use of landmarks and unique structures.
- Incorporate public art to provide a unique perspective and iconic element.
- Create gateways and definable edges at neighborhoods with special signage, landscape treatments, and built elements.

Safety *A safe and secure environment through urban design supports social contact and active public places.*

- Establish a safe and secure environment by the use of "eyes on the street" - a strategy derived from the notion that streets are safer when busy and when people are watching, creating a more defensible space.
- Utilize public seating in open spaces, encouraging people to see and be seen.
- Provide facades with many windows and doors facing streets to improve visibility and access

Public art celebrates community values and enhances visual interest *{San Francisco, CA}*

Parks provide places for cultural events and socializing *{Chicago, IL}*

Seating enables group interaction and provides passive surveillance *{Valladolid, Spain}*

Seating provides opportunities for active and passive gatherings *{New York, NY}*

Creative use of existing spaces expands cultural and community learning and gathering opportunities *{New York, NY}*

Public art strengthens community identity and aides wayfinding *{Vercorin, Switzerland}*

Interpretive signage educates and informs the public to unique histories, events, and places *{Indianapolis, IN}*

Community events, such as CicLAvia, encourage social interaction and pride in the community *{Los Angeles, CA}*

Why This Matters To...

YOU Active participation from community members results in a greater personal investment in the community and the establishment of kinship and connection.

L.A. A successful and safer community results from people who are connected and invested in each other, creating a network of healthy neighborhoods within the city.

Clean Environment

Personal health, as a result of environmental factors, is well documented, with access to clean air, water and land, as fundamental contributor of individual health and well-being. Contaminated surroundings lead to increases in a multitude of diseases including asthma, various cancers, and other chronic conditions. Resolution of these issues requires complex solutions that are beyond the scope of this document, but urban design can assist in mitigating the impact of a polluted environment. Simple yet effective strategies can reduce greenhouse gas emissions and remediate polluted water and land leading to a decrease in associated diseases.

8% of children

More than 8 percent of children in LA suffer from asthma. An increase in tree-lined streets could lower the number by 25 percent.[29]

1 tree

One tree can remove 26 pounds of carbon dioxide from the atmosphere annually – the equivalent of 11,000 miles of car emissions.[30]

2% reduction

For every 5 percent of tree cover added to a community, storm water runoff is reduced by 2 percent.[31]

Air *Reducing air pollution through physical design is introduced here as part of the overall fundamentals of a healthy community. The following strategies provide a basic introduction to the myriad potential improvements that can be made to the physical environment to improve air quality.*

- Planting street trees will clean air by reducing pollutants, dust and pollen.
- Reducing vehicle miles traveled through increased walking, biking and active transportation lessens greenhouse gas emissions.

Water *Urban design strategies addressing protection of the water supply and storm water management are the primary components introduced in this section. Further resources addressing this topic are readily available from other sources.*

- Limit development within 50 feet of water bodies.
- Reduce storm water runoff by increasing permeability to prevent harmful land pollutants from getting into waterways.
- Use best management practices such as bio-swales and detention ponds to capture stormwater.
- Reduce storm water runoff by utilizing street trees to filter contaminated water.

Land *The strategies included in this section are only a small aspect of responding to land degration, soil contamination and habitat destruction.*

- Utilize land development strategies centering on reuse of previously developed land.
- Mitigate brownfields for active infill urban development.
- Limit exposure to polluted soils and leftover contaminates.
- Protect prime soils.

Urban forests sequester CO^2 and filter pollutants from ground water *{Boardman, OR}*

Green roofs help minimize stormwater impacts from storms *{Philadelphia, PA}*

Engineered wetlands treat wastewater and runoff before reintroduction into the water system *{Birmingham, AL}*

Sidewalk bio-swales treat and reduce runoff *{Los Angeles, CA}*

Permeable pavement allows for stormwater filtering and absorption *{Arnhem, Netherlands}*

Constructed wetlands treat wastewater *{Shanghai, China}*

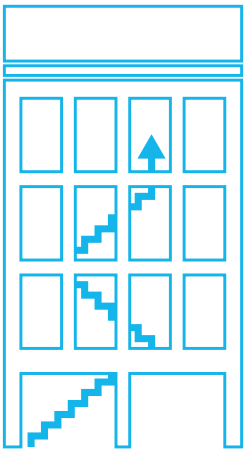
Increase permeability to prevent harmful land pollutants from entering waterways *{Los Angeles, CA}*

Bioremediation of soils on a post-industrial sites allow for renewed access to clean land and habitat opportunities *{Los Angeles, CA}*

Why This Matters To...

YOU Eliminating air, water, and land pollution lessens personal exposure to the potential effects of carcinogens. and chronic diseases.

L.A. Planting trees can provide shade, save on energy costs, clean air, reduce greenhouse gas emissions, capture polluted urban runoff and beautify neighborhoods.



Built Environment

The built environment encompasses structures, parks, streets, and is the most permanent aspect of our city. It also can be the most influential and impactful element on health of the urban environment. Building locations and relationships, function and design influence how residents and users perceive their neighborhood and how they move throughout their day.

A neighborhood is best organized so that it is active, connected and conveys a strong sense of place. Architectural design supports well designed neighborhoods and impacts individual wellness through a wide range of strategies. Buildings can contribute to placemaking by acting as landmarks or destinations and together, they can create a cohesive community character. Architectural massing, façade design and entry location support pedestrian friendly streets while building elements such as windows can increase visibility and security. The design of buildings can encourage people to incorporate physical activity into their everyday life through their relationship with the street, sidewalk and by the organization of their interior spaces.

There are numerous neighborhoods in L.A. with vastly diverse characters, cultures and forms. While each deserves a custom fit, a mix of land uses, compact development and increasing density in developing or established communities, while encouraging active building design, contributes to strong communities and healthy lifestyles.

0.5% rise

Every 1 percent rise in the urban sprawl index increases the risk of obesity by 0.5 percent.[32]

12% reduction

Each quartile increase of land-use mix—an attribute of neighborhoods that encourages walking—yields a 12 percent reduction in the likelihood of obesity.[33]

Climbing stairs

Climbing stairs is twice as taxing as brisk walking and 50 percent harder than walking up a steep incline or lifting weights. Peak exertion is attained much faster through climbing stairs than walking.[34]

Density nodes *In a city that is growing in population, densifying certain areas contributes to active living while preserving the low density / suburban, or at times rural character, of some of Los Angeles' neighborhoods.*

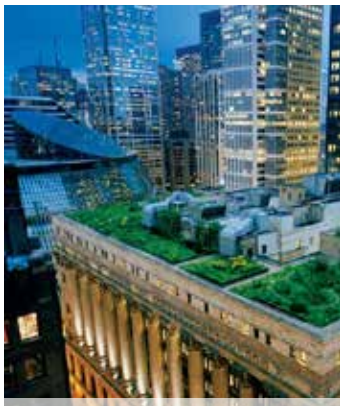
- Utilize mixed use development. Residents are more likely to walk if there is a diversity of usable destinations within walking and biking distance.
- Provide access to supermarkets, schools, retail stores, and offices within ¼ mile walk of residential neighborhoods.

Architectural Design *A building's relationship to the urban fabric supports pedestrian friendly environments and its design can increase opportunities for physical activity.*

- Design building massing that responds to pedestrian scale and creates visual interest.
- Designing prominent stairways encourages their use.
- Provide at least one visible stair in all buildings for everyday use.
- Locate building functions to encourage walking to shared spaces and resources, rather than for convenience.
- Create building entrances near public transit stops to promote its use.
- Incorporate universal design increasing access for people of all abilities

Innovative design integrates opportunities for gardens, access to natural light and room for physical activity *{Copenhagen, Denmark}*

Universal design allows for equitable access and activity by all users *{Madrid, Spain}*



Rooftop gardens utilize spaces often overlooked *{Chicago, IL}*

Grade changes can be seamlessly incorporated into architectural design and improve access *{Rijeka, Croatia}*

Prominent exterior stairs promote activity while also creating unique architectural opportunities *{Los Angeles, CA}*

Higher desity development creates a compact footprint and allows for increased walkability to goods and services *{West Hollywood, CA}*

Centrally located stairs reinforce physical activity as well as create impromptu socializing opportunities *{Los Angeles, CA}*

Why This Matters To...

YOU Increased physical activity by stair use burns calories and can also have a direct impact on cardiovascular health

L.A. The clustering of homes, jobs, retail, and services create urban nodes with the potential of increasing activity and connectivity. Because of the population density, these nodes may be well served by public transit, enabling convenient access to the region for a broader segment of the population

Footnotes

1 Center for Disease Control and Prevention

2 Los Angeles County Department of Public Health Services Public Health (2001). Health-related quality of life in Orange County. Available at http://publichealth.lacounty.gov/ha/reports/habriefs/v3i4_qol/qualolife.pdf.

3 Institute of Medicine, 1997, 9.

4 Ogden, CL and Carroll, MD (2010). Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1976-1980 Through 2007-2008. Available at http://www.cdc.gov/NCHS/data/hestat/obesity_adult_07_08/obesity_adult_07_08.pdf. Accessed May 16, 2011.

5 Thomas Friedan, Director of the Center of Disease Control and Prevention.

6 Ogden, CL and Carroll, MD (2010). Prevalence of Overweight, Obesity, and Extreme Obesity Among Adults: United States, Trends 1976-1980 Through 2007-2008. Available at http://www.cdc.gov/NCHS/data/hestat/obesity_adult_07_08/obesity_adult_07_08.pdf. Accessed May 16, 2011.

7 Goldberg, Chapman, Frank, Kavage, & McCann. New data for a new era: A summary of the SMARTRAQ findings. Available at http://www.smartgrowthamerica.org/documents/SMARTRAQSummary_000.pdf.

8 Balish, C. (2006). How to live well without owning a car: Save money, breathe easier, and get more mileage out of life. Berkeley, CA: Ten-Speed Press.

9 Menschik, D; Ahmed, S; Alexander, MH; Blum, RW (2008). Adolescent physical activities as predictors of young adult weight. Archives o Pediatrics and Adolescent Medicine, 162, 23-28. Available at http://www.ncbi.nlm.nih.gov/pubmed/18180409.

10 Balish, C. (2006). How to live well without owning a car: Save money, breathe easier, and get more mileage out of life. Berkeley, CA: Ten-Speed Press.

11 Balish, C. (2006). How to live well without owning a car: Save money, breathe easier, and get more mileage out of life. Berkeley, CA: Ten-Speed Press.

12 Goldberg, Chapman, Frank, Kavage, & McCann. New data for a new era: A summary of the SMARTRAQ findings. Available at http://www.smartgrowthamerica.org/documents/SMARTRAQSummary_000.pdf.

13 Goldberg, Chapman, Frank, Kavage, & McCann. New data for a new era: A summary of the SMARTRAQ findings. Available at http://www.smartgrowthamerica.org/documents/SMARTRAQSummary_000.pdf.

14 Trust for Public Land.

15 Miller, D. (2012). Presentation in New York: Greater and Greener: Reimagining Parks for 21st Century Cities. Dr. Daphne Miller is a professor of family and community medicine at University of California, San Francisco. Available at http://dirt.asla.org/2012/08/01/parks-are-part-of-our-healthcare-system/. Accessed September 16, 2012.

16 Good food for all agenda, 2010.

17 Daniels, P (2010). Good food for all - A new food policy for Los Angeles. Good Food blog. Available at http://blogs.kcrw.com/goodfood/2010/09/los-angele-food-policy.

18 Pino, L. (2010). Good food for all agenda. Lisa Pino is the USDA Deputy Administrator of the Supplemental Nutrition Assistance Program for President Obama.

19 Los Angeles County Department of Public Health (2010). Public health receives unprecedented $32 million award: Grant from HHS and CDC will aid in prevention efforts for obesity and tobacco. Available at http://www.publichealth.lacounty.gov/docs/PressRelease.pdf.

20 Los Angeles Food Policy Task Force (2010). The Good Food For All Agenda: Creating a regional food system for Los Angeles. Available at http://goodfoodlosangeles.files.wordpress.com/2010/07/good-food-full_report_single_072010.pdf.

21 The Leopold Center for Sustainability.

22 Los Angeles Food Policy Task Force (2010). The Good Food For All Agenda: Creating a regional food system for Los Angeles. Pp. 106. Available at http://goodfoodlosangeles.files.wordpress.com/2010/07/good-food-full_report_single_072010.pdf.

23 Morland, Diex, Roux, Wing (2006). Supermarkets, other food stores, and obesity: The atherosclerosis risk in communities study. American Journal of Preventative Medicine, 30 (4).

24 Los Angeles Food Policy Task Force (2010). The Good Food For All Agenda: Creating a regional food system for Los Angeles. Pp. 53. Available at http://goodfoodlosangeles.files.wordpress.com/2010/07/good-food-full_report_single_072010.pdf.

25 Williams, SM; Chapman, D; Lando, J (2005). The role of public health in mental health promotion. Center for Disease Control and Prevention MMWR Weekly. Available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a1.htm.

26 Leyden, KM (2003). Social capital and the built environment: The importance of walkable neighborhoods. American Journal of Public Health, 93, pp. 1546-1551.

27 Rogers, SH; Halstead, JM; Gardner, KH; and Carlson, CH (2011). Examining walkability and social capital as indicators of quality of life at the municipal and neighborhood scales. Applied Research in Quality of Life, 6 (2), pp. 201-213. Available at http://www.springerlink.com/content/xtq06270p27r1v0h.

28 Relph, EC (1976). Place and placeslessness. Pion Ltd.

29 Million Trees LA (2012). Examples of the benefits trees provide. Million Trees LA. Available at http://www.milliontreesla.org/index.htm.

30 Million Trees LA (2012). Examples of the benefits trees provide. Million Trees LA. Available at http://www.milliontreesla.org/index.htm.

31 Million Trees LA (2012). Examples of the benefits trees provide. Million Trees LA. Available at http://www.milliontreesla.org/index.htm.

32 Boston University School of Public Health, cited by Placemakers (2012). Places that pay: Benefits of placemaking. Placeshakers and Newsmakers. Available at http://www.placemakers.com/2012/09/13/places-that-pay-benefits-of-placemaking.

33 Frank, LD; Andresen, MA; and Shmid, TL (2010). Active Design Guidelines: Promoting physical activity and health in design. City of New York. Available at http://www.nyc.gov/html/ddc/html/design/active_design.shtml.

34 Simon, HB (2009). Stairs as a fitness tool? New York Times: Health. Available at http://consults.blogs.nytimes.com/2009/06/15/stairs-as-fitness-tool.

Resources

Reports

2011 City park facts, Trust for Public Land, http://cloud.tpl.org/pubs/ccpe-city-park-facts-2011.pdf

Bicycle-friendly communities: Lessons from Los Angeles County, Choose Health LA, http://www.publichealth.lacounty.gov/place/docs/bike_friendly_la_toolkit_FINAL_lores.pdf

Building health: Creating and enhancing places for healthy, active lives, National Heart Forum, http://nhfshare.heartforum.org.uk/RMAssets/Reports/BuildingHealth_Main.pdf

Building healthy communities: Ten outcomes for community health, The California Endowment, http://www.calendow.org/communities/building-healthy-communities/

Comprehensive planning for public health: Results of the Planning and Community Health Research Center Survey, American Planning Association, http://www.planning.org/research/publichealth/pdf/surveyreport.pdf

Creating defensible space, US Department of Housing and Urban Development, http://www.huduser.org/publications/pdf/def.pdf

Crime prevention through environmental design: General guidelines for designing safer communities, City of Virginia Beach Municipal Center, http://www.humanics-es.com/cpted.pdf

Healthy Cities, United Nations Human Settlements Programme, http://www.unhabitat.org/pmss/listItemDetails.aspx?publicationID=2455

Healthy community design checklist, Center for Disease Control and Prevention, http://www.cdc.gov/healthyplaces/factsheets/healthy_community_checklist.pdf

Healthy community design: Success stories from state and local leaders, Robert Wood Johnson Foundation, http://www.activeliving.org/files/HealthyCommunityDesign_ALL.pdf

Healthy design guidelines, Los Angeles County Department of Regional Planning, http://planning.lacounty.gov/assets/upl/data/ord_healthy-design_guidelines.pdf

Healthy Development Measurement Tool checklist, City and County of San Francisco, http://www.sustainablesf.org/etc/HDMT_Development_Checklist_January_2010_Version_3.02.pdf.

Healthy parks, schools, and communities: Mapping green access and equity for the Los Angeles region, The City Project, http://www.cityprojectca.org/publications/documents/Healthy_Parks_Schools_Communities_textonly.pdf.

Hidden health costs of transportation, American Public Health Association, http://www.apha.org/NR/rdonlyres/F84640FD-13CF-47EA-8267-E767A1099239/0/HiddenHealthCostsofTransportationShortFinal.pdf

How to create and implement healthy General Plans: A toolkit for building healthy, vibrant communities, Public Health Law and Policy and Raimi + Associates, http://changelabsolutions.org/sites/changelabsolutions.org/files/Healthy_General_Plans_Toolkit_Updated_20120517_0.pdf

Land use planning for safe, crime-free neighborhoods, Center for Livable Communities, http://www.lgc.org/freepub/docs/community_design/focus/plan_safe_neighborhoods.pdf

National prevention strategy: America's plan for better health and wellness, US Department of Health and Human Services, http://www.healthcare.gov/prevention/nphpphc/strategy/report.pdf

Our cities, our health, our future: Acting on social determinants for health equity in urban settings, World Health Organization, http://www.who.int/social_determinants/resources/knus_final_report_052008.pdf.

Physical environment and crime, US Department of Justice, https://www.ncjrs.gov/pdffiles/physenv.pdf

Placemaking and the future of cities, Project for Public Spaces, http://www.pps.org/wp-content/uploads/2012/09/PPS-Placemaking-and-the-Future-of-Cities.pdf

The city planner's guide to the obesity epidemic: Zoning and fast food. The Center for Law and the Public's Health, http://www.publichealthlaw.net/Zoning%20City%20Planners%20Guide.pdf

The path to healthy communities: Mapping California's priorities, Having Our Say Coalition, http://cpehn.org/pdfs/PathToHealthyCommunities%206_08.pdf

Transportation and health: Policy interventions for safer, healthier people and communities, Partnership for Prevention, http://www.prevent.org/data/files/transportation/transportationandhealthpolicycomplete.pdf

What's health got to do with it? American Planning Association, http://www.nelsonnygaard.com/Documents/Articles/Commissioner-Article.pdf

What's old is new again, as markets and streets provide an avenue for building healthier cities, Planetizen, http://www.planetizen.com/node/57940

Case Studies

Becoming Greenest, Washington, D.C., http://www.asla.org/sustainabledc.aspx.

Copenhagen Super Bikeways, http://www.cykelsuperstier.dk/concept.

Grow Dat Youth Farm, Chicago, IL, http://growdatyouthfarm.org/

Million Trees LA, California, http://www.milliontreesla.org/mtabout.htm

Million Trees NYC, New York, http://www.milliontreesnyc.org/html/about/about.shtml

Pavement to Parks, San Francisco, CA, http://sfpavementtoparks.sfplanning.org/

Portland Community Gardens, http://www.portlandonline.com/parks/index.cfm?c=39846

The Food Project, Boston, MA, http://thefoodproject.org/

Websites

Active Design Guidelines, City of New York, http://www.nyc.gov/html/ddc/html/design/active_design.shtml

Community Design and Safety, Local Government Commission, http://www.lgc.org/issues/communitydesign/safety.html

Curbed LA on Complete Streets, http://la.curbed.com/tags/complete-streets

Designing healthy communities, http://designinghealthycommunities.org/

Healthy and Livable Communities, American Society of Landscape Architects, http://www.asla.org/livable.aspx

Healthy Communities Program, Centers for Disease Control and Prevention, http://www.cdc.gov/healthycommunitiesprogram/

Healthy Spaces and Places, Australia, http://www.healthyplaces.org.au/site/

National Association of County and City Health Officials official website for Land Use Planning 101 Resources, http://www.naccho.org/topics/environmental/landuseplanning/toolbox.cfm

Trust for America's Health, www.healthyamericans.org

Image Credits

Walkability: atelier 2, camera_obscura, Alejo Bagué, Paul Warchol, gehlarchitects, Jack Coyier, Will Sherman, Matt Cheetham

Bikeability: Enrique Peñalosa, Stirling Elemendorf, duncan via Flickr, Jamison Wieser, BeyondDC via Flickr, tylerbreed, João Silveira Ramos

Active Transit: Klaus Philipsen, City of Stuttgart, Thiess Australia, Doug Wallick, Antonio Gallud, junkmail26c, Mathieu Delorme, Morio

Public Open Space: James Whitaker, Robert Parrish, Günter Richard Wett, Dezeen, Kåre Viemose, Steven Kyle Weller, Project for Public Spaces, Architects Newspaper Blog

Locally-Produced Food: Scott Shigley, mindfrieze, atelier d'architecture autogeree, Michael Kalus, Edie Morton, Noah Berger, satrina0

Access to Nutritious foods: narnua, veloveggies, Warehouse America, tojosan, sitephocus, GAD, Grubstreet

Social Capital: stuck in customs, tefocoto, EXP Architects, jason.kuffer, Robert Hofer, sitephocus, Gary Leonard

Clean Environment: sitephocus, GTFF, Se Eun Gong, Strootman LA, kongjian yu, cherry tor, teufel landscape

Built Environment: JDS Architects and BIG - Bjarke Ingels Group, madrid2noticias, Diane Cook, 3LHD architects, lacma, Rosa Say, christian jay, David Cal

designing a...

healthy LA

Gensler