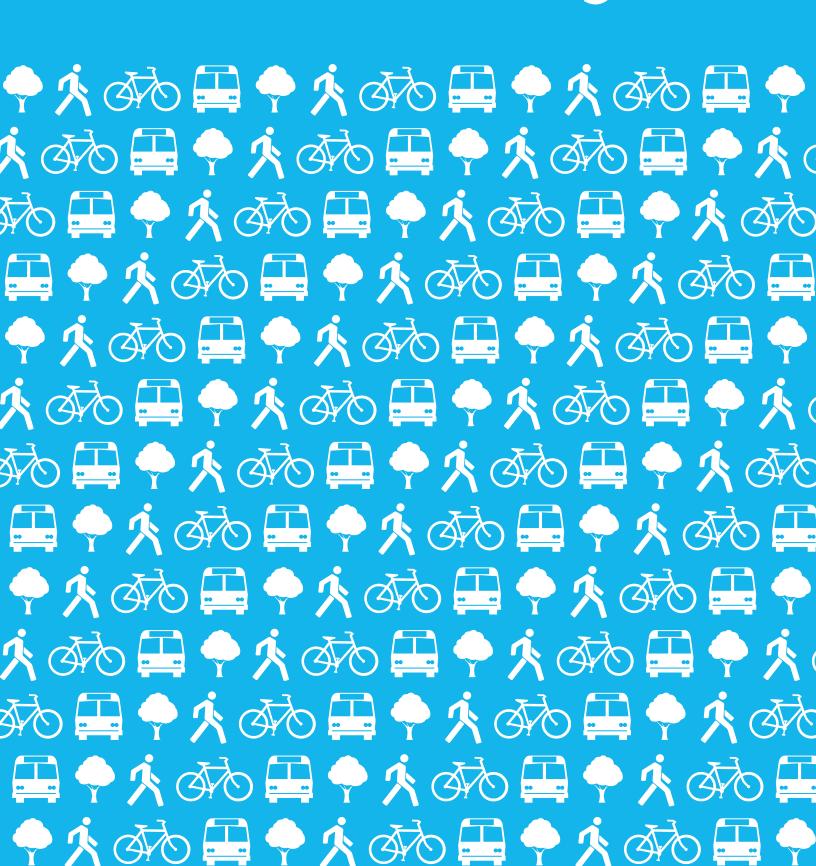
a healthy LA



...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." 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 ago⁶

a 1 km walk

Walking one kilometer (just over a half-mile) every day can reduce your odds of obesity by five percent⁷

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 treadmill⁸

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}

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.



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

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}

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.

Ox 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 transitoriented 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.





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



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







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



Green infrastructure at transit stops can enhance the environment (Sheffield, England)



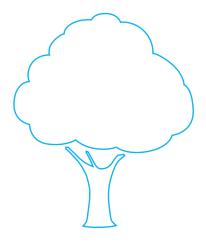
Public transit supports pedestrian activity in commercial districts without the effects of heavy vehicular traffic (New York, NY)



allowing for reduced overall transit times {Curitiba, Brazil}

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. 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.

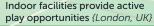
- Provide public transit to natural recreation areas.
- Preserve and restore the natural integrity of the mountains, beaches and rivers.







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}



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}

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.