



SPORTIFY CITIES GUIDELINES & STRATEGIES

PRINCIPLES for Outdoor Gym Areas



OUTDOOR GYMS — GENERAL

- In various cities the integration of outdoor gym equipment into urban settings has become an effective and popular active health features.
- Clusters of all-weather outdoor stationary fitness facilities are mostly located in urban parks, close to sports facilities, within residential estates and along trails.
- Large-size outdoor gym areas typically consist of up to 15 gym stations, varying in functionality, size and quality.
- Numerous high-density cities in Asia have systematically incorporated this active lifestyle feature into their urban environments, providing local residents with access to free-of-charge and easy-to-use fitness facilities.



CLASSIFICATION

If adequately designed, outdoor gym areas provide people of all ages and abilities with a convenient urban health feature for overall physical fitness including strength, flexibility, agility, balance and endurance (usually, no speed tasks are offered within outdoor gym areas).

Outdoor Gym Equipment — Categories:

- A. Low-resistance endurance stations
- B. Flexibility and balancing stations
- C. Body weight-based strength stations
- D. Body weight-supportive strength machines
- E. Resistance variable strength machines



CLASSIFICATION

A. Low-resistance endurance stations

Elliptical cross-trainers, sky runners and recumbent bicycles are the most common low-resistance endurance stations, designed for seniors and people with musculoskeletal conditions who aim to improve cardiovascular fitness and to reduce body weight. They typically contain single-resistance levels, preventing users from conducting more intense cardio sessions.

B. Flexibility and balancing stations

Arm stretchers, waist stretchers, Tai Chi wheels, balancing beams, back massagers and body twistors are regularly installed in urban centres across East and Southeast Asia.

C. Body weight-based strength stations

Parallel dip bars, pull-up bars, push-up bars, sit-up benches, back extensions and monkey bars are the most common muscle-strengthening stations. Some of the tasks require greater physical fitness levels.

D. Body weight-supportive strength machines

Machines such as leg press, lateral pull down, seated chest press machines are particularly popular among older users. The resistance of these machines can not be adjusted to the personal strength levels due to absent load increment options — that is, the resistance level is restricted to the user's own body weight.

As a result, the neuromuscular system gets accustomed to the invariable intensity levels (usually within a few weeks of practicing), suppressing continuing gains in strength and muscle mass and limiting health benefits.

E. Resistance variable strength machines

Gym apparatuses with adjustable dumbbells — e.g., machines with weight stacks, cable machines or hydraulic equipment — are the most effective muscle-strengthening options.

Given their higher product and maintenance costs and greater safety risk, they are rarely incorporated into outdoor gym areas. Furthermore, a systematic installation of such resistance-adjustable equipment is only suitable for locations with low levels of vandalism and theft.





PRINCIPLES

Six Key PRINCIPLES for Outdoor Gym Areas:

1. Locality
2. Agglomeration
3. Multifunctionality
4. Accessibility
5. Supply and Demand
6. Design

These Guiding PRINCIPLES are based on:

- Qualitative and quantitative observations in various urban areas including Singapore, South Korea, China, Canada, Australia, USA, Ukraine and Brazil
- Principles of New Urbanism
- Components of visual and landscape design
- Findings in behavioural sciences
- Trends in city liveability

PRINCIPLES

1. Locality

Guidelines for suitable locations:

- ✓ Installing fitness stations along key trails for walking, running and cycling and close other facilities for sport and physical activity. In this way, residents will be able to conveniently complement their main outdoor or indoor physical activity with fitness tasks.
- ✓ Establishing gym areas within proximity to shower facilities and security lockers provided in urban parks, reserves and sport complexes.
- ✓ Favouring locations with suitable climate conditions; long periods of extremely hot or cold temperatures throughout the year will result in limited usage of equipment.



PRINCIPLES

2. Agglomeration

Guidelines for spatial distribution and concentration:

- ✓ Reducing the number of small-sized gym areas consisting of fewer than 5 fitness stations that are scattered across parks and along trails.
- ✓ Concentrating a wide range of fitness stations in preferably mid- to large-scale gym areas. As a result, more residents will be encouraged to visit the areas longer and more frequently.

PRINCIPLES

3. Multifunctionality

Guidelines for task functionality:

- ✓ Installing adequate equipment tailored to the specific needs of various populations groups irrespective of age, fitness level and physical ability.
- ✓ Ensuring the improvement of the overall fitness including strength, flexibility, balance and endurance by providing a large variety of suitable fitness stations.
- ✓ Avoiding high concentration of monofunctional fitness equipment in any particular section of a gym area.



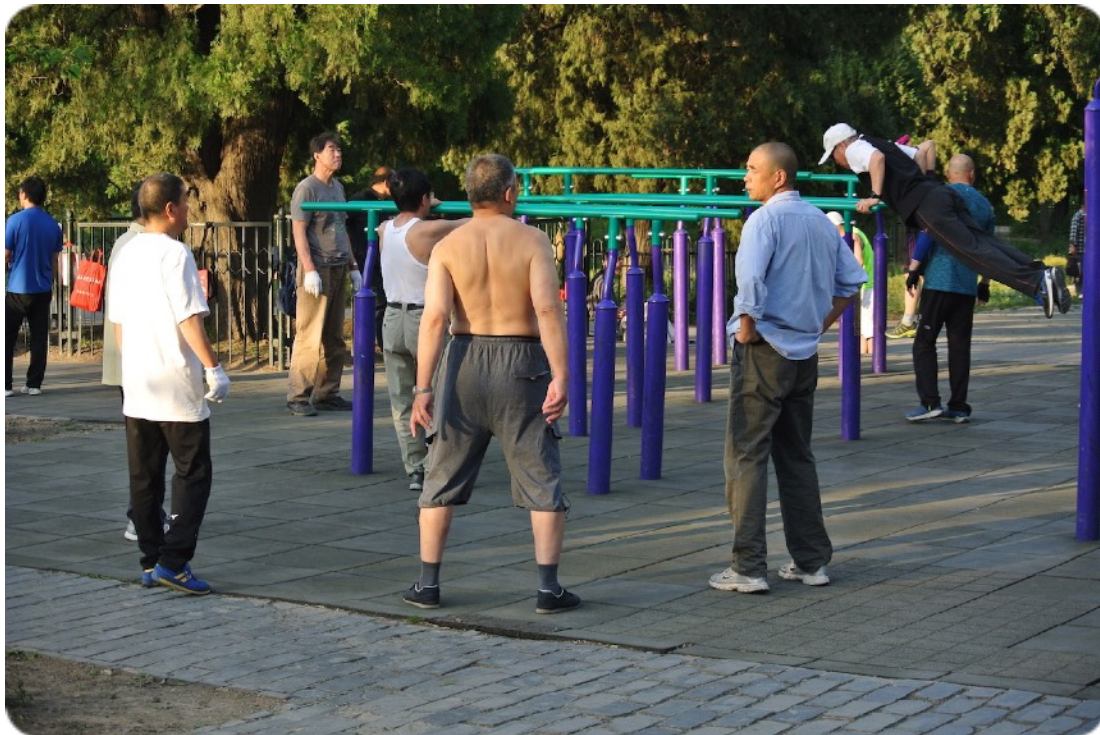
PRINCIPLES

4. Accessibility

Guidelines for accessible areas:

- ✓ Locating gym areas within walking distance to commercial zones, public transport system or car parking — particularly, in low-density urban areas.
- ✓ Ensuring within-walking distance accessibility of gym equipment within residential clusters in high-density urban areas.
- ✓ Providing wheelchair-friendly space between stations tailored to people with physical disability.
- ✓ Installing adequate lighting to facilitate the use of gym areas in the early morning and evening.





PRINCIPLES

5. Supply and Demand

Guidelines for demand-oriented planning:

- ✓ Monitoring the demand for gym areas and installed equipment.
- ✓ Evaluating the optimal quantity and functionality of equipment regarding desired health benefits and user satisfaction.
- ✓ Replacing existing low-demand stations with more functionally suitable and more popular alternatives.
- ✓ Ensuring that the selection of fitness equipment reflects age distribution trends of local residents living within a defined catchment area of the designated outdoor gym area.

PRINCIPLES

6. Design

Guidelines for beautification:

- ✓ Applying the integrative concept of green space and outdoor gyms by planting shady trees within and around gym areas.
- ✓ Offering beautiful and inspiring settings by using suitable colours for the equipment, ground surface and the surroundings.
- ✓ Selecting and locating fitness equipment based on a visually balanced approach to designing gym areas including shape, scale and space.





PRINCIPLES FOR OUTDOOR GYM AREAS

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