



SKATE PARK SAFETY GUIDELINES HANDBOOK



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SKATE PARK SAFETY GUIDELINES

Skateboarding and inline skating have become increasingly popular recreational activities during the past decade. American Sports Data estimates there are more than 9.3 million skateboarders skating at least twice a week. The rise in popularity has spawned specialty shops, clothing, videos, magazines, televised competition, and construction and design firms all aimed at meeting skaters' needs. Public entities have likewise responded to this rise in popularity by building facilities specifically designed for skating and skateboarding. This manual will provide some key elements that should be considered when establishing a skate park.

History of Skateboarding: According to the book The Concrete Wave, by Warwick Books, skateboarding actually began in the early 1900's with roller skates attached to a 2x4 with a milk crate in which to sit and handles for control. Later the milk crates were removed and steel wheels were used in lieu of roller skates. In the 1950's as surfing became more popular, people began to associate surfing with cruising on a board and the use of clay wheels began. Surfing on sidewalks started as popularity increased in the 1960's and some people began to skate in empty swimming pools. International contests, movies and magazines also increased interest in the sport; however, the fad waned until the early 1970's when the use of a board with urethane wheels began. This made a great improvement in the ride and began the second boom in 1973. In 1975 the first precision bearing wheel replaced the loose ball bearings.

In 1976 the first outdoor skate park was built in Florida and was soon followed by parks across North America. Skaters began to change from horizontal to vertical, and slalom to freestyle. In 1978 the "ollie" or no hands aerial advanced skating to the next level when skaters began to take vertical moves to flatland. However, insurance for skate parks became a liability issue inhibiting the development of parks. Once again only the hardcore skaters remained and built backyard ramps and half pipes. Gradually in the early 1980's more contests were held with vert riding and street style skating creating more interest until the end of the decade when ollies and technical tricks became more popular. In 1991 due to the worldwide recession, the skating industry experienced another slump. Popularity increased in 1995 and continues unabated.

Injuries, Liability Exposures and Governmental Protection: Public entities are often nervous about building skateboard parks due to concerns over injury and liability; however, the number of injuries occurring while skateboarding is less than in some other popular sports. The National Consumer Products Safety Commission's (CPSC) National Electronic Injury Surveillance System reports the following injury rates for 1997.

Activity	Total Emergency Room Visits	Total ER Visits Per Patient
Football	334,420	0.028
Baseball	326,569	0.025
Basketball	644,921	0.014
Soccer	148,913	0.008
Skateboarding	48,186	0.006

According to the CPSC, since 1980 three deaths have occurred to skateboarders; all were related to accidents involving motor vehicles, and likely would not have occurred if a safe skating area away from traffic had existed. The CPSC also reports that one-third of those skating have been skating less than one week, two out of five injuries were to persons borrowing boards, and only five percent of injuries were serious enough to need treatment with inpatient care. Half of the accidents occurred due to the skater striking an irregularity in the surface.

Due to the nature of the sport, individuals will have falls and injuries may occur. Many of the injuries will be unreported but more serious injuries may result in claims against the entity to whom the park belongs. The potential for such claims needs to be taken seriously by public entities. Colorado law provides that a public entity is not immune from liability for a “dangerous condition of ...a public facility located in any park or recreation area” maintained by it. C.R.S. Section 24-10-106(1)(e).

By properly managing the skating area, the possibility of injuries can be reduced. This can be achieved by exercising due diligence in the design and construction of the site, providing well-documented maintenance, and posting appropriate signs.

Getting Started, Plans, and Funding: When considering the construction of a skateboard park, the entity should obtain as much information as possible. Local officials should meet with skaters and develop sample plans. Skater involvement with the planning and implementation will increase a sense of ownership. This involvement should include site design, equipment, operations and locations. Architects with experience in designing skating parks should be integrally involved with the process. Some architects have developed excellent skills in facilitating skater involvement in the planning and design process. The International Association of Skateboard Companies (IASC) can offer assistance with ramp plans, design and other references for the development of the skateboard parks. Many skating magazines also offer plans for sale.



Skaters can help identify their favorite obstacles and develop a model with the space and funds available. Considerations should be given to proper flows, good lines of movement, standing areas for those waiting their turns, drinking fountains, areas with shade, access to restrooms, and a view for how it can be expanded, modified, or removed in the future.

Skaters should be made aware of the entity’s construction budget so that the plans can be developed accordingly. An adequate budget must also exist for subsequent inspections and maintenance of the site.

Location and Size: Choosing a location is important since it should be readily accessible and highly visible during daytime and at night. Noise concerns should also be evaluated. Locating the site away from nearby residential areas is preferred. A larger site does not necessarily make a better skate park. The actual design and layout will determine the



maximum number of users and also influence the volume of use. The International Association of Skateboard Companies states that a 10,000 square foot area should accommodate 50-60 skaters at any one time.

Mixed Use: Since the same obstacles are used by skaters and bikers, the entity will need to determine whether and how the two groups can use the same site. Bicycle foot-pegs may cause damage to some surfaces. If the skating area is indoors, additional ceiling clearance is needed for bikes. Having both skaters and bikers in the skating area increases the chance of injury if the groups do not establish a good pecking order and respect each other.



Lighting: If the skating site is to be used after dark, it should be provided with adequate lighting that does not interfere with other park activities or homes in the neighborhood. A documented inspection of the lighting should be conducted at least monthly. If the intent is not to have skating after dark, then lights will only encourage nighttime skating.

Construction: Although there is no single national standard, the skating community recognizes a number of safety considerations in design and construction features. Skateboard ramps and similar items should be designed and constructed based on blueprints from reputable manufacturers. There are several nationally recognized companies from which blueprints can be purchased at reasonable prices. These items should be approved and installed by a qualified contractor. Makeshift items should not be permitted. Obtaining input from skaters when planning the park or adding additional items may help identify exposures. Refer to the sources of information in the appendix for more information.

In general, ramp height should be limited to six feet in open public parks since most skaters will not be at the expert level. Sixteen-foot wide ramps are also recommended. Sharp angles and edges next to the platforms on ramps should be constructed with curved railings.

Obstacles constructed of wood or masonite over wood are not recommended in climates with large temperature changes due to quick deterioration caused by weather and heavy use. Rain also destroys masonite. The time spent repairing and replacing these items could be substantial. Items made of steel, concrete, Skatelite or fiberglass over a wood frame are recommended despite the higher initial costs.



Obstacles constructed of steel are not only durable but also movable. Skatelite combines the advantages of wood, plastic and metal into one material. The phenolic fiber laminate is resistant to weather, high-usage wear and tear, has favorable surface qualities and requires little maintenance. It is used in many competitive skate parks in America.



Ramp platforms over four feet in height should have 42-inch high side and back protection with a mid-rail capable of sustaining a force of two



hundred pounds applied in any direction. An exterior access such as a stairway with a handrail to the platform is also recommended.



Signage: Signs should encourage appropriate behaviors such as the use of safety equipment. Rules should be worded to encourage compliance and to be enforceable. Established rules help ensure safety and minimize injuries. Rules should be posted conspicuously at the skating area and should include, but are not limited to the following:

1. "USE OF THIS SITE IS AT YOUR OWN RISK."
2. Use of safety equipment including helmets, gloves, knee and elbow pads, wrist supports, and proper shoes is required.
3. All users are responsible for providing their own skateboard, skates and equipment, and for ensuring that they are maintained in good working order.
4. The [entity name] reserves the right to revoke use of the site privileges for individuals who are rowdy or do not obey the rules.
5. Hours of permitted use are from _____ to _____.
6. No makeshift items or modifications to existing ramps and like items are permitted.

Other helpful rules may include the following:

1. Only one user is permitted on a ramp (item) at a time. No more than 3 individuals are permitted on the ramp waiting platform.
2. Skating is allowed only in authorized areas. Respect the neighborhood and avoid excessive noise.
3. Please keep food and beverages off the skating surface and use the trash cans.
4. In case of a serious injury or other emergency, call 911.
5. Spectators should observe from outside the skating area.



Rules should be strictly enforced from the beginning. If not enforced, the site will often be used for non-desirable activities. Providing a safe and clean environment will encourage continued use of the park for its desired purpose.



Fencing: Should the skating site be fenced? Fencing not only adds to construction cost but also requires ongoing maintenance. Some fenced locations have been vandalized by having the fences cut or gates torn down to

gain access during hours when the park was closed. This creates more maintenance work and increased cost. Fenced locations usually work best when onsite staff can supervise skating, with park rules and hours strictly enforced by staff and the local police. If fenced, the fence should be a minimum of 8 feet in height and located at least 8 feet from skate lines.

Staffing: Providing a well-trained onsite staff increases the operating costs but also helps ensure skaters follow the rules. A phone, emergency phone numbers, and emergency first aid and supplies can be made readily available. Good communication skills can assist in maintaining good relationships with the skaters. Well trained staff can perform and document regular inspections. They can ensure the site is well kept, and make repairs or complete work orders for more extensive work. They can also secure damaged skating obstacles until the repairs are completed. On site staff can monitor the volume of users and help ensure adequate separation of beginner and more advanced skaters.

Inspections and Maintenance: All facilities need regular maintenance. The entity should be prepared to establish an annual budget for inspection and repairs. A routine visual inspection and monthly documented inspection should be performed. The inspection form should include all items in the skate park with special emphasis on areas where maintenance is likely. It should include walking and standing surfaces, steps, handrails, and other key areas. The inspection form should be tailored for each site. A work order should be promptly completed for any item needing repairs that is identified during the inspection. Attaching angle iron to the skating portion of obstacles will prohibit skating on these surfaces until maintenance is completed. If an object is secured to the skating surface, it should be painted a bright orange or yellow so that it is readily obvious. Documentation should also be kept of all inspections, securing methods, and repair(s).

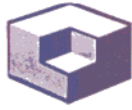


Emergencies: Plans for injuries and emergencies should be addressed. Emergency phone numbers should be posted. If a phone is not readily accessible, the location of the closest phone should be stated on the sign containing the park rules.

Claim Reporting: All claims should be investigated and promptly reported to the entity's insurance contact then forwarded to CIRSA or other insurer. Appropriate action should be taken to secure the site if a hazard exists.

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Skate Park Appendix



PARK SURVEY – Use this form to gather information from other towns with parks, and present data to your city council. Refer to the Sources of Information section for whom to contact.

General:

1. How long has your park been in operation? _____
2. Where is it located? city park _____ city property other than park _____ other _____
3. Are there other playgrounds/recreation areas/equipment incorporated into the park? _____
4. What are the hours of operation? _____
5. Is the skate park lighted? _____ supervised? _____
6. Is protective equipment required? _____ Are “user’s risk” signs posted? _____
7. Estimate number of users per day. _____
8. Is the park open to: inline skates? _____ roller skates? _____ bikes? _____
9. What is the user age breakdown? age 5-10 _____% age 11-15 _____% 16 and over _____%
10. How well do diverse groups get along? (skaters-inliners-bikers-roller skaters-different ages)?

Building/maintenance:

1. How was the site chosen? _____
2. What was the cost to build? _____
3. Did you receive donations? corporate _____ private _____ comments _____
4. Have you had vandalism at your park? _____ What type (ie-graffiti, destruction of nearby ground, public urination)? _____
5. What are the average costs for repairs? _____
6. What are the standard maintenance requirements/costs for your park? _____ yearly
_____ monthly _____ daily

PARK SURVEY - useful in gathering information from other towns with parks, and presenting data to your city council (cont.):

- 7. If you were building again, what changes/improvements would you make? _____

- 8. Does your city have plans to build any skate parks in the future? _____
- 9. Any additional comments? _____

Liability

- 1. Is your city self insured? _____ If not, do you use a special liability carrier? explain _____

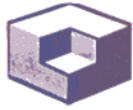
- 2. Estimate number of injuries since park opened _____ claims _____ lawsuits
- 3. Estimate amount paid out in claims since park opened _____
- 4. Are minors required to have a signed parental consent to use the park? _____
- 5. Does your city have an ordinance regarding skateboarding (ie-no skating in business districts)?
_____ explain _____
- 6. Do you have any problems with people bringing skateable objects to add to the park? _____

- 7. In your opinion, what is the biggest problem with the park? _____

- 8. In your opinion, has the park added to or eased the “problem” of skating in your town?

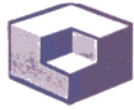
SITE SURVEY – Pick a few possible sites in your town and rate them for the following criteria, using your own rating method and including comments.

Selection Criteria	Rate	Site	Site	Site
Proximity to bus lines				
Expansion potential				
Parking				
Perceived safety (crime area)				
Proximity to other playground park elements				
Foot/bike access				
Visibility				
Neighborhood impact – visual				
Neighborhood impact - sound				
Spectator Accommodation				
Community benefit				
Lighting/phone drinking fountain				
Proximity to Business/services				
Proximity to Primary users				
TOTALS				



USER SURVEY – Copy and pass this out. It shows interest and potential of your park.

1. I am a: skateboarder _____ inline skater _____ roller skater _____ BMX bicyclist _____ other _____
2. I am _____ years old.
3. I have been doing my sport for _____ years.
4. I do it _____ days a year.
5. I do it for _____ hours a day.
6. I live: in town _____ within 5 miles of town _____ over 5 miles from town _____
7. To get to and from skate spots, I: drive walk _____ skate _____ bike _____ bus _____ other _____
8. I usually travel _____ miles to do my sport.
9. I would potentially use a public park in my town _____ days a week.
10. I have been: ticketed _____ times; arrested _____ times for my sport.
11. I have had my skateboard confiscated _____ time(s).
12. I have traveled to other towns with public parks _____ times.
13. I would _____ would not _____ volunteer to build/maintain/supervise a public park.
14. I spend \$ _____ a year on equipment for my sport.
15. The money I spend on my sport comes from: parents _____ self _____
16. After high school I plan to go to: university _____ community college _____ trade school _____
start working _____ other _____
17. _____ I am not a skater/inline skater/roller skater/biker, but I would be a spectator at the park.



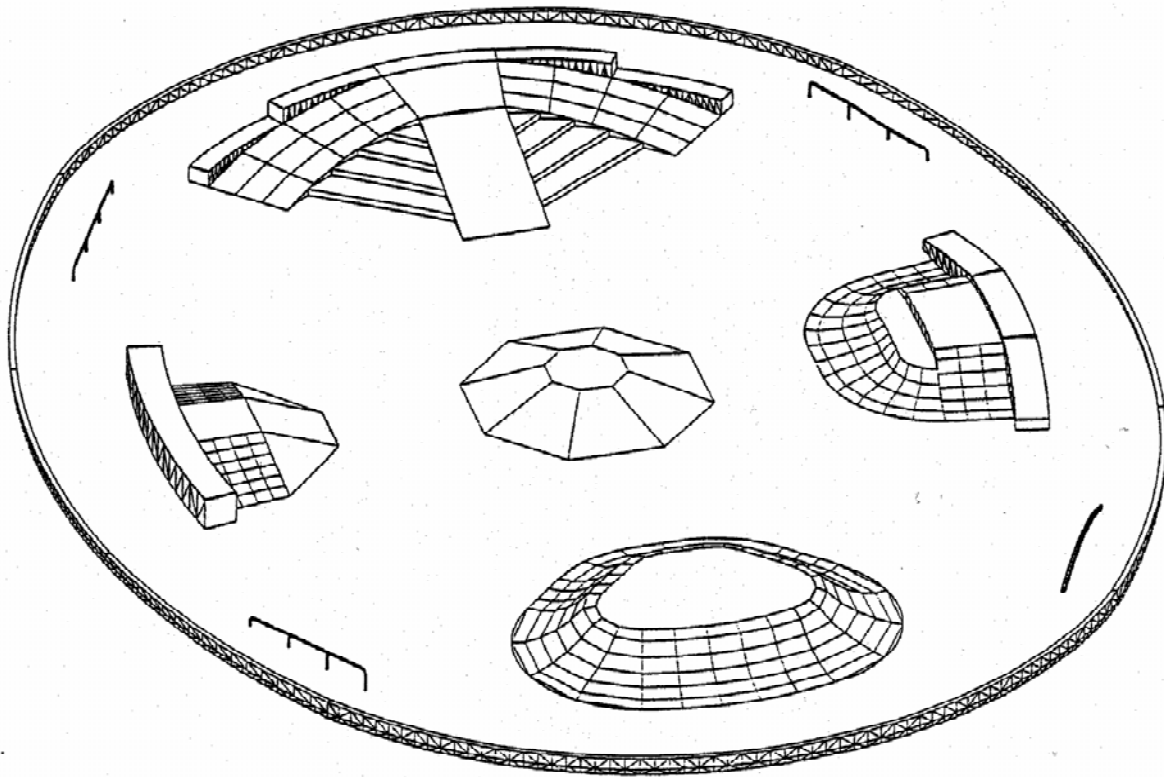
SAMPLE PARK PLANS; one possible park, to be built on existing city-owned area, and covering roughly the same space as two basketball courts (plans drawn by and ©Wormhoudt Landscape Architecture):

Size: 8000 sq.feet

Cost: \$90,000

Time to construct: 1.5 months

Number of users/spectators: 15-20 users at a time / over 200 spectators on burmed lawn area



**These plans are meant as a sample ONLY and are not meant to be built from,
as there may be inconsistencies in size, shape, and scale**

**Informed Consent/Liability Waiver Form
For the City/Town of _____**

In consideration for being permitted to use the City/Town of _____'s skate park, the undersigned, on behalf of himself/herself and his/her heirs, successors, representatives, and assigns, hereby expressly exempts and releases, and agrees to indemnify and hold harmless, the City/Town, its officers, employees, insurers, and self-insurance pool, from and against all liability, claims and demands, which are incurred, made, or brought by him/herself or any other person or entity, on account of damage, loss, or injury, including without limitation, claims arising from property loss or damage, bodily injury, personal injury, sickness, disease, death, or any other loss of any kind whatsoever, which arises out of, or in any manner connected with, the use of the skate park.

Signature: _____ Date: _____

Signature of Parent or Guardian (if you are under 18 years old):

_____ **Date: _____**

Sources of Information

Zirbell Panel Fabrication

7677 Lone Pine Drive
Golden, CO 80403
Phone: (303) 278-9024
Pager: (303) 826-6557
Fax: (303) 278-1714
Contact: Richard Zirbell

Zirbell makes prefabricated skate park features. They manufacture above ground obstacles and will be producing a line of "Mavericks" skate ramps. They also perform the steel work for ground bowls and build inline hockey rinks. Projects completed include skate parks in Broomfield, Thornton, Parker, Boulder and at Rock Creek South Recreation Center.

Skateparks International

1401 E. Bridge Street #8
Brighton, CO 80601
Phone: (303) 655-9006
Fax: (303) 659-9326
www.sk8parks.com
E-Mail: info@sk8parks.com

Skateparks does planning, consulting, design and fabrication of steel and concrete obstacles. Steel obstacles are made of 100% steel. A consulting package is available for purchase. They have provided skate parks for municipalities across the United States since 1989. Projects in Colorado include the municipalities of Golden, Steamboat Springs, Wheat Ridge, Arvada, and Loveland.

MountainRamp, Inc

Matt Demers
6270 Arapahoe Avenue, #3
Boulder, CO 80303
Phone: 1-877-544-9684
E-Mail: mtnramp@mountainramp.com

MountainRamp performs all phases of the skate park development from site and layout selections to construction and final installation. Several projects in Colorado include the municipalities of Basalt, Commerce City, Holyoke, Wellington, Ray, and Berthoud.

International Association of Skateboard Companies (IASC)

Box 37
Santa Barbara, CA 93116
Phone: (805) 683-5676
Fax: (805) 967-7537
www.skateboard.com/iasc
E-Mail: nosewriter@aol.com

Thrasher sells a book of ramp plans through
High Speed Productions
1303 Underwood Avenue
San Francisco, CA 94124
Phone: (415) 822-3083
Fax: (415) 822-8359
www.thrasher magazine.com

RampTech
14855 Persistence Dr.
Woodbridge, VA 22191
Phone: (703) 492-2378
Fax: (703) 492-1023
www.ramptech.com
RampTech makes of ramps, rails and sells ramp plans.

Consolidated Skateboards
P.O. Box 1279
Santa Cruz, CA 95061
Phone: (831) 457-8206
Fax: (831) 457-8219
E-Mail: conskate@ix.netcom.com

Rainier Richlite - Skatelite
624 East 15th Street
Tacoma, WA 98421
Phone: 1-(888) 383-5533
E-Mail: richlite@richlite.com