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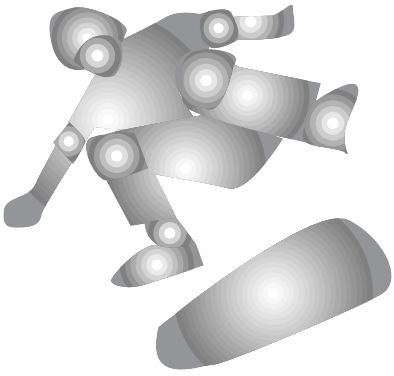

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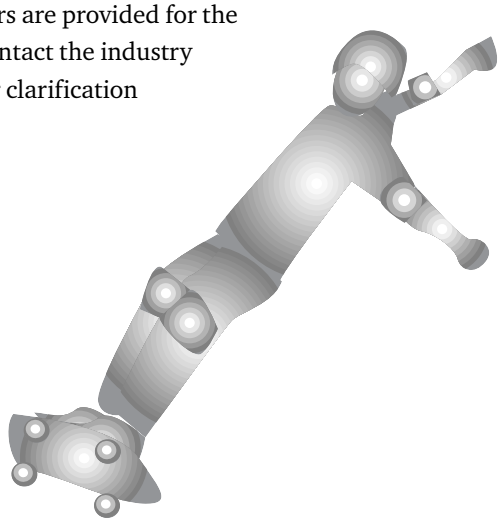
As a consequence information in this publication particularly as to structures, equipment or activities of skateboarding, inline skating or BMX riding should be carefully evaluated for accuracy, currency, completeness and suitability and appropriate professional and technical advice relevant to particular circumstances should be obtained.

In addition references to specific consultants or contractors are provided for the reader's information only, and users are encouraged to contact the industry association or other professional organisations for further clarification regarding information contained in this publication.



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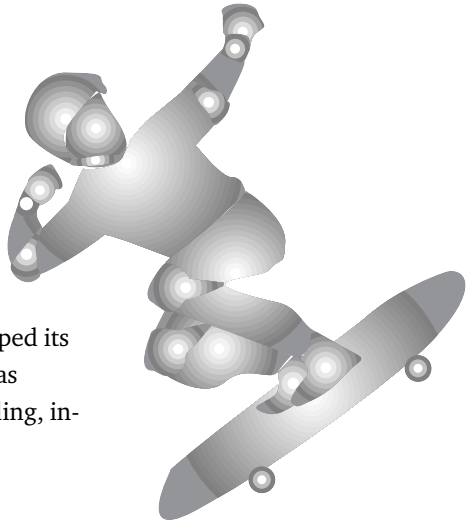
Preface



It's nearly thirty years since skating first started attracting attention as an everyday recreational pursuit and a sport. Akin to surfing, and requiring much the same range of skills, it developed its own ethos, culture, uniform and language. Since then, skating has diversified into a number of specific sports, including skateboarding, in-line and quad skating.

Key segments

- aggressive skating
- recreational and fitness in-line skating
- artistic skating
- hockey (and other roller sports)
- speed skating

Overall, skating can be broken down further into the following segments: aggressive skating (skateboard and in-line), recreational and fitness in-line skating, artistic skating, hockey and other roller sports, and speed skating.

The term "aggressive" is commonly used in the industry. It refers to an accepted style of skateboarding and in-line skating sometimes known as free-style. In this guide it is used to distinguish between the bulk of the skateboard market and in-liners — who use skate parks and obstacles — from recreational and fitness skaters. Aggressive skating should not be confused with combative or hostile behaviour.

The term "skaters" is used throughout this document as a generic word for all users of these facilities.

This guide focuses primarily on the provision of facilities for skateboarding but it also includes information about in-line skaters and free-styler BMX riders as they also use skate parks.

It is aimed at providing information for a variety of interest groups. Professional planners and designers in a range of disciplines will find the historical and industry sections useful.

The guide is also intended to be a resource for young people and communities as they endeavour to make their way through the complex design, development and approvals processes necessary to create a skate facility.

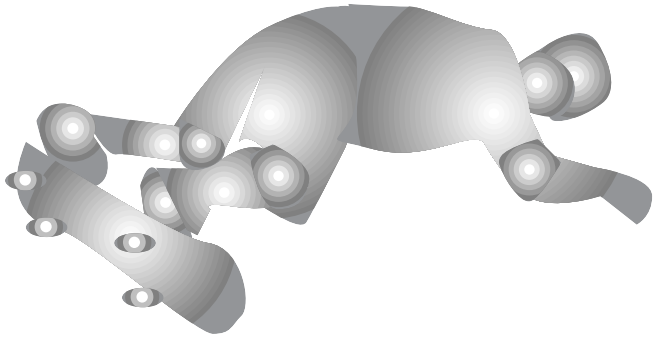
The checklists are intended to highlight the many steps involved in these processes and give some sense of the amount of time and preparation required to fully satisfy all design, consultation and planning requirements.

Acknowledgements

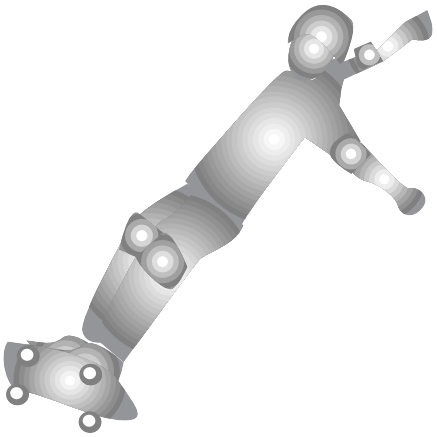
The text for this document was written and prepared by Jeavons Recreation & Tourism Planners in December 1999 in conjunction with Tony Hallam Skate Park Design and Brian Ward and Partners.

This project drew on the goodwill and advice of a wide range of people — with different interests and expertise. In particular, the contribution of the following people is gratefully acknowledged:

- the project steering committee
- those who attended the industry workshop
- suppliers of skate products and services interviewed
- local councils who responded to requests for information, and
- skating enthusiasts.



1. History



Lessons from history

Skateboarding has evolved steadily. Peaks of activity have occurred every four or so years, directly reflecting changes in technology and product development, public sentiment, facility availability, and more recently, the economic climate.

The initial surge of popularity coincided with a large number of accidents due to poor equipment design (particularly narrow decks and clay wheels). Ever since then many children have been discouraged from taking up skateboarding. Those who continued to skate were often tagged as rebellious — and often marginalised.

The common view that skateboarding was only a fad, and a dangerous one at that, led some local councils to hesitate about providing facilities. Skaters were pushed away from mainstream sports provision and, in order to test their new and expanding skills, they moved back on to the streets — where conflicts were waiting to happen. For skaters, participation itself came to be seen as a form of resistance.

Daring to be different has been an integral part of the appeal of skateboarding in contrast to in-line skating and, to an extent, BMX riding. These gained more public support, perhaps because they grew out of mainstream sports and had a broader range of participants drawn from a wider age group.

The phases of development [1]

The fifties and before

The first skateboards were roller skates nailed to planks of wood. Then came the advent of clay wheels. A boom in surfing led more young people to seek the same thrills on the street. Skateboarding was the answer. The first commercially manufactured skateboards, Roller Derby boards, became available in 1959. Most activity took place on footpaths and streets.

The sixties

By 1963, Makaha and Hobie were manufacturing high-performance clay-wheeled skateboards and the first skateboard contests had been staged in California. Pioneered by surfers, the first facilities reflected surf interests: wave-like forms, bowls, runs, mounds. Empty swimming pools became a particularly popular target. By 1965 there were movies, magazines, international contests, and 50 million boards sold.

The great crash of sixty-five was due to inferior product, little or no research and development, too much inventory and a hostile public, due to reckless riding. Clay wheels, although cheap, had little grip and caused many accidents. Skating went underground.

The seventies

Cadillac wheels introduced the first urethane wheel for skateboards. These, along with the wide top, or deck, trucks specifically for skateboards, and then (in 1975) precision bearings, improved manoeuvrability — and a second boom occurred with an estimated 30 million skaters world-wide.

In this decade, the sport, awash with new products, rapidly became an industry. Slalom, downhill and freestyle developed and skateboarding was on a roll again. The first skate park was built in Florida in 1976. The sport moved from slalom and freestyle to vertical. Boards became wider (from six inches up to nine inches) and graphics appeared under decks, following Dogtown's example. In 1978, Alan "Ollie" Gelfand's invention of a new move, the no hands aerial (the "ollie"), took skateboarding to a new level and made it possible to jump curbs.

Skateboarding was now on a par with other popular cultural activities such as roller disco and CB radio. **[2]** More than 300 skate parks were built in the USA, but most were built with gunite and poorly constructed.

The roots of street style developed. More influenced by gymnastics than surfing, newer, angular forms were "new school", waves were "old school". Skateboard culture meshed with punk and new wave music but this new style, 'street skating', led to a rash of injuries. Skateboarding was again denounced as dangerous, antisocial, and, most significantly, uninsurable — leading to the closure of many skate parks in the USA. **[3]** Although the popularity of skating waned, the subculture blossomed. *Thrasher* magazine, launched in 1979, became the bible of skate style in the 1980s. **[4]**

In-line skates, invented by a Minnesota hockey player for off-season activity, were discovered by people who recognised them as a great new means of transportation with added fitness and recreation benefits. **[5]** The concept quickly caught on.

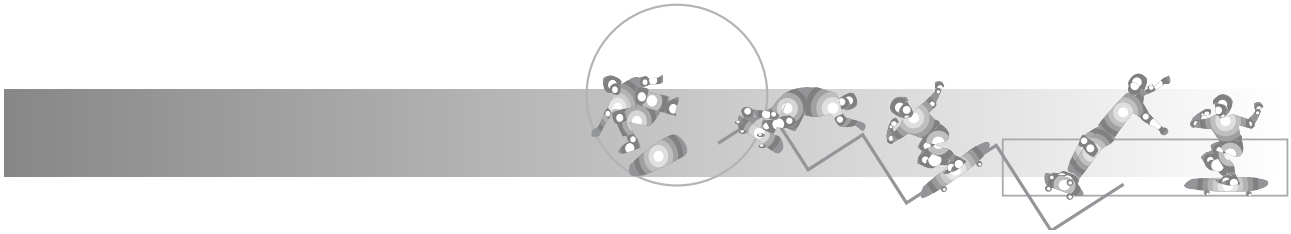
The eighties

BMX riding became popular and a large number of tracks, both competition and recreational, were established across Victoria. By 1980 a number of municipalities had in-ground half pipes. Large timber skate ramps in backyards became common and private concrete skate parks were built. Portable vertical ("vert") ramps appeared during Melbourne's Moomba festival. Some councils either built or purchased transportable ramps.

In 1983, the Victorian Government published its first *Skateboard Facilities Manual*. However, in the USA, skate parks were being torn up due to the threat of litigation and the cost of insurance.

Nineteen eighty-four saw the advent of vert riding in the USA, followed closely by freestyle skating. The US National Skateboard Association was formed and contests, where big money could be earned, became common place. Skate fashion moved from surf-derived "rad wear" and shiny plastic padding to B-Boy-inspired baggy pants, oversized shirts and specialised shoes. Skateboarders were no longer seen as surfies but aggressive urban guerillas seeking out highway underpasses, irrigation channels, dry swimming pools and empty buildings or car parks.

Videos, then a new form of communication, fed new forms of skating and shifted the balance of power to the street. New moves developed by professionals were scrutinised and copied by street skaters. Although videos helped create a boom in the 1980s, access to production technology was limited and the long lead times slowed the dissemination of new ideas. It was not until the nineties that video equipment and technology became readily available, allowing tapes of new tricks to be distributed rapidly around the world. **[6]**



The nineties

Street skating became the sport's most popular style. A number of American professional skaters formed their own companies to promote the sport — and a new school of skateboarding was born with the focus on technical tricks and ollies. In the 90s the internet provided young skaters with an ever-expanding source of information about every aspect of skating, relatively cheaply.

The world recession in 1991 saw a major downturn in skating. Only a hard core group of skaters survived. Then snowboarding appeared — as a fully fledged sport — and skateboard facilities boomed again. However, by the mid-90s, skateboarding was America's sixth largest participant sport, and professional skateboarders toured the world making a living from endorsement deals. In 1994 the International Association of Skateboard Companies (IASC) was formed. By 1995 new skate products and exposure of the ESPN2 Extreme Games in the USA nurtured the fourth boom.

In Australia, public street-style areas appeared, although there was still demand for vert ramps from older skaters. Indoor facilities also emerged.

But there were new pressures on the sport. Regulatory authorities, especially local councils, objected to skaters in shopping centres, deploring the damage done to walls and benches. Conflict with other users was a major reason for the enactment of new anti-skating local laws. In 1998 a nationwide campaign, Skateparks USA, was launched to co-ordinate legislative efforts supporting local communities who wanted to develop and build public skate parks. At that time, in parts of the USA skateboarding was classified as a hazardous recreation activity, thus placing responsibility for injuries back onto the user and reducing concern about insurance premiums or litigation on the part of authorities.

A revival in the development of large-scale facilities followed. Most skate parks focused on the needs of aggressive in-line skaters, BMX riders, and skateboarders, but some newer parks included rinks and tracks to broaden their appeal, mainly to attract in-line hockey players and to accommodate lessons.

In 1999 in Victoria and across Australia, a boom occurred in facilities both large and small. In Victoria alone there were some 66 skate parks in the planning or construction phases, and 81 constructed. Although vert ramps were still popular with older participants and for competition, demand was mainly for street-style facilities. The range of age groups was broadening, but young participants (under 10 years) were mostly street skaters. Managers of skate parks reported fathers who grew up skateboarding returning with their children.

Skateboarding was continuing to diversify with Snakeboards (boards with independent steering on each axle) entering the market, long boards making a comeback, as well as downhill, or street luge, and a huge growth in mountain boards with inflatable tyres for off-road use.

The future

- More opportunities for recreational skating
- More indoor and private facilities
- Skate camps run by private operators
- More events

What we can expect in the future?

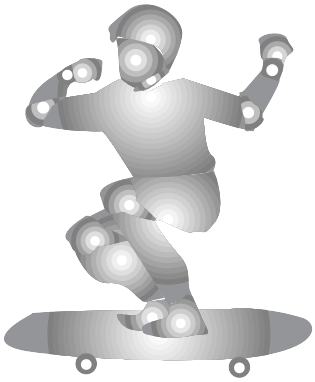
Demand will continue to shift rapidly for skating facilities and products in response to commercial pressure, fluctuating public appeal and changes in leisure behaviour.

In-line skating will continue to grow, especially in family environments, with participation continuing into middle age. Pressure will increase from recreational skaters, for example for expanded path networks and foreshore promenades. More in-liners will convert to aggressive skating, especially with the availability of better quality facilities and opportunities, and more products will be available specifically for women. The sport will have broader community appeal and additional numbers are likely to convert to in-line hockey. Indoor family skate parks, similar to the indoor playground model, are likely to be developed and may incorporate:

- retail outlets
- video lounge, kiosk or café
- party packages
- fun for the whole family
- lessons, clinics and competitions
- displays of skater (and skating) memorabilia.

The future is likely to offer more opportunities for recreational and fitness skating, new indoor and private facilities, more commercial facilities and skate camps, and a greater depth of competitions and events.

2. The market



Key segments

- Aggressive skaters (in-line, skateboards and BMX free-stylers)
- Competitive roller sports (in-line hockey and roller sports)
- Recreational and fitness in-line skaters (families and individuals)

There are three key groups of skaters with different needs who should be considered by local government: aggressive skaters, competitive roller sports participants and recreational in-liners. Participation rates in each sector have been analysed for this report, as well as age and gender factors. Freestyle BMX riders, although users of skate facilities, are considered to be part of the bicycle market and therefore were not included in market analysis required for this project. This guide focuses on the first category, aggressive skaters.

Participation

There are an estimated 407,000 in-line skaters in Victoria and 250,000 skateboarders. Of these, 143,000 in-line skaters and 88,000 skateboarders are estimated to be frequent or regular participants. Several recent surveys indicate that localities with skate facilities may have higher participation rates — up to 30 per cent higher — than areas with no facilities. **[7]** American Sports Data (early 1999) estimates some 9.3 million skateboarders under the age of 18 years skate at least twice a week in the USA, while more than 2,000,000 skateboarders say they skateboard every day. **[8]**

Age and gender

Although the proportion of girls skateboarding seems to be increasing, 91 per cent of the participants are boys between 10 to 16 years of age. **[9]** Recent anecdotal evidence from skaters, retailers and skate park managers indicates that the core age range of skateboarders is expanding, with more and more skateboarders maintaining their boards and their abilities beyond the age of 16. **[10]**

Anecdotal evidence also suggests that there is growth in skateboarding in the under 10 year old age group, among females, and in the over 19 year old age group. With more purpose-built facilities available, older participants are continuing to skate longer — even returning to skate with their children. However, participation in skateboarding appears to peak at around the age of 14.

The patterns of participation do appear to be related to age. The majority of younger skaters are street skaters and the majority of vert ramp skaters are 16 or over. Estimates of the number of skaters in the age group 10–19 years are provided in the tables following.

Table 1: Estimates of skateboarding participation in Victoria

Participation rates			Population data			Participation numbers		
Age (years)	With facility	No facility	Total Served population (aged 5+)	Not served by a facility	Skate boarders served by a facility	Skate boarders not served by a facility	Total by a facility	by a facility	skate boarders
5–9	30%	25%	311,200	158,200	153,000	47,400	38,300	85,700
10–14	45%	35%	307,600	153,700	153,900	69,200	53,900	123,000
15–19	15%	10%	306,900	165,600	141,400	24,800	14,000	38,900
20+	<1%	<1%	3,121,800	1,725,800	1,396,000	1,700	1,400	3,100
Total			**4,047,600**	**2,203,200**	**1,844,300**	**143,200**	**107,600**	**250,700**

Source: Australian Bureau of Statistics, *Census of Population and Housing, 1996*, and participation rates estimated for Victoria by Essential Economics based on Jeavons Recreation & Tourism Planners surveys.

Table 2: Estimates for in-line skating participation in Victoria

Participation rates			Population data			Participation numbers		
Age (years)	With facility	No facility	Total Served population (aged 5+)	Not served by a facility	In-line skaters served by a facility	In-line skaters not served by a facility	Total by a facility	by a facility	in-line skaters
5–9	60%	55%	311,200	158,200	153,000	94,900	84,200	179,100
10–14	60%	55%	307,600	153,700	153,900	91,700	84,700	176,300
15–19	15%	15%	306,900	165,600	141,400	24,800	21,200	46,000
20+	<1%	<1%	3,121,800	1,725,800	1,396,000	3,500	2,800	6,200
Total			**4,047,600**	**2,203,200**	**1,844,300**	**214,800**	**192,800**	**407,700**

Source: Australian Bureau of Statistics, *Census of Population and Housing, 1996*, and participation rates estimated for Victoria by Essential Economics based on surveys conducted by Jeavons Recreation & Tourism Planners in 1999.

Table 3: Estimates of 'frequent or regular' skate participation in Victoria

Activity	(a) Total participation	(b) Regular participation rate	(c) Regular participation (a x b)
Skateboarding	250,700	35%	88,000
In-Line Skating	407,700	35%	143,000

Source: Estimates by Essential Economics based on surveys conducted by Jeavons Recreation & Tourism Planners in 1999.

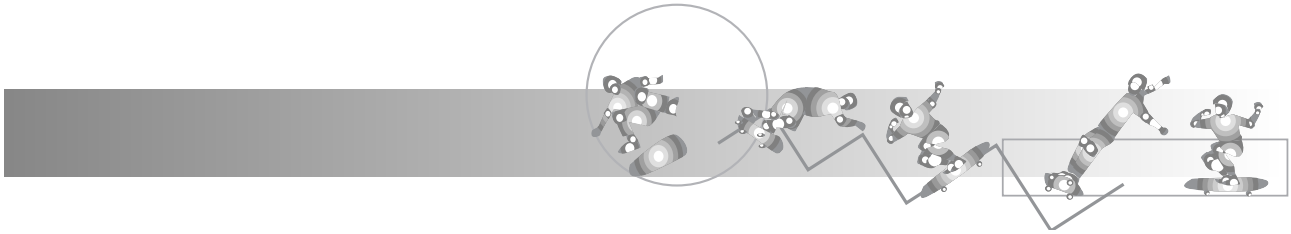


Table 4: Indicative frequency of skating and BMX, 5-to-19-year age group

Frequency	Skateboarding	In-line skating	BMX
Two or more times per week	10%	11%	36%
Most weekends	5%	11%	18%
Once in a while	27%	39%	23%
Never	42%	28%	26%

Source: Two recent surveys (over 500 children each) by Jeavons Recreation & Tourism Planners. **Notes:** (1) Participation rates have been derived from a number of leisure surveys conducted by Jeavons Recreation & Tourism Planners. In-line skating figures were provided by Brian Sweeney and Associates and the Australian Bureau of Statistics. Figures for the over-20s are conservative — 'most enjoyed' or 'regular participation' only. Also, a number of skate facilities were not identified until after these estimates were obtained and therefore participation rates for six municipalities were calculated as if they were without facilities. (2) All figures are rounded.

Trends in the USA

The Sporting Goods Manufacturers Association (SGMA) in the USA has been tracking in-line skating participation for eight years. In that time the sport growth rate has been an astonishing 848.9 per cent! In-line skating participation by Americans over five years of age reached 29.1 million in 1997, a 5.6 per cent increase from the previous year. Although this increase is the lowest in eight years (possibly reflecting a generally slow year in the sporting goods industry) it still outpaced most other sports and recreational activities. Only 22 of 66 sports in the SGMA survey grew in 1997. Of activities with 25 million participants, only three grew faster than skating in 1997 — golf, treadmill exercise and camping. In-line skating ranked eleventh in participation out of 66 sports. **[11]** This figure would include a range of in-line skaters, not just the aggressive in-line skater or those using skate parks. Of those activities with more participants than in-line skating, only camping, bowling, billiards and hiking grew at a faster rate in 1997.

Economic value of the market

The international situation

In 1995, skateboard manufacturers formed a non-profit trade association, the International Association of Skateboard Companies (IASC), dedicated to promoting the sport, as well as promoting sound business practices. In 1997, total world-wide sales, when shoes and all skateboard-related accessories were included, was estimated to be more than $750 million. There are currently more than 70 international distributors of skateboard hardware and more than 1,200 direct-sale retailers. **[12]** Apart from skating hardware and software, there are considerable sums of money involved in skate-related events. In 1999, the Vans–Hard Rock Triple Crown had a total prize pool of US$75,000.

In Australia

In Australia, unlike most other sports and recreation activities, there are no official industry-wide sales figures collected for the skateboarding and in-line skating sector which would provide an accurate representation of the industry's market value. Instead, to determine the financial contribution of these

activities, market value must be derived through estimation. Three approaches are used here to provide a realistic range of likely value:

- United States spending patterns applied to Victoria
- ABS data extracted on sports spending patterns
- average equipment costs based on Victorian retail outlets.

There is sufficient correlation to suggest that the market value in Victoria is in the order of $50 million per annum (see Table 5), but this may be conservative since expenditure on skating-related items by non-participants is excluded. While purchases by non-participants are likely to occur, especially due to the strong association of skateboarding and in-line skating with street culture and fashion in general, an exclusive connection between recreation and fashion is difficult to determine.

The market is divided into hardware and software segments. Hardware includes skateboards, in-line skates, skateboard and in-line skate components, and protective equipment. Software includes clothing and footwear, hats, graphic products and videos. Evidence from the USA suggests that two-thirds of market value in the industry is derived from the hardware segment, and one-third is from software sales. **[13]**

The following table provides an estimate of the market value of the skating industry based on the three approaches described on the previous page.

Table 5: Market value per annum estimates Victoria (rounded totals)

Approach	In-line	Skateboard	Total
USA spending data	$18 m	$11 m	$29 m
ABS spending patterns			
- all-sports basis	$32 m	$20 m	$52 m
- most comparable sport basis	$37 m	$23 m	$60 m
Victorian retail data (average equipment costs retail outlets)	$29 m	$21 m	$50 m

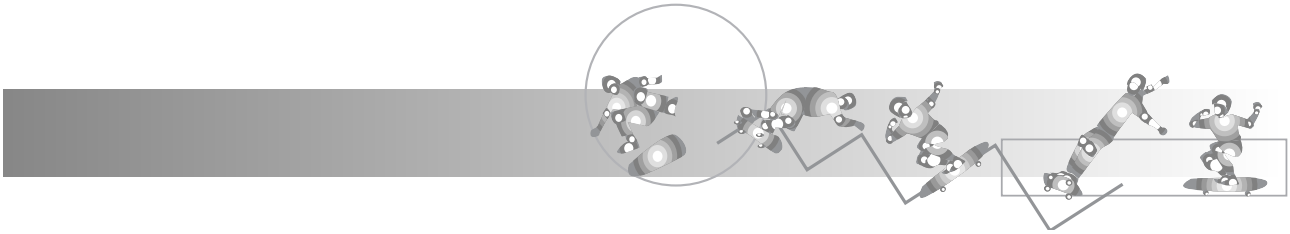
Source: Summary — refer to the text.

How organised is the sport of skating?

Skating is a well organised competition sport. However, unlike traditional team sports it is rare to find local skate clubs or associations. Where these exist their role is usually to develop or look after a skate park. Nevertheless there are usually well-developed local networks of skaters and an almost universal bond between skateboarders.

Career paths

Skating now has all the trappings of an elite sport. Participants in in-line skating, skateboarding and BMX riding can compete as individuals, as amateurs, at professional levels and as teams representing different sponsors. There are now careers for skaters with high skill levels, as riders with international companies in the UK, Europe, Canada, the USA — as well as here in Australia.



Participants are able to earn an income through endorsements. At this level of competition their routine commitments, over and above training and team activities, include photo opportunities and media liaison, activities with sponsors and obligations to local, national and international events (e.g. xtreme games, gravity games, world cup meets and world championships).

Making connections

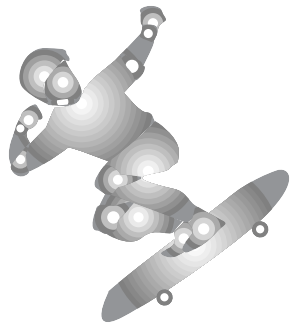
Skaters, many councils reported, have shown little interest in joining organisations because it is not part of the culture of skating — where the focus is on individuality, non-conformism and freedom. However, many local groups have been formed specifically to advocate for a facility or to oversee its ongoing development. Despite low involvement in formal associations and clubs by individual skaters, local skating networks are frequently strong. Important entry points into the network include retail outlets, skate personalities, local police, youth agencies, the internet and skate magazines.

South Australia has an active skateboard association. Victoria is in the process of forming one. The City of Wollongong has one of its own. Look up skateboard associations at www.skateboard.com.

The Melton Skate Park Committee worked well for the purpose of designing and constructing the skate park. Then interest dropped off. Some younger skaters saw the committee as a bit exclusive, some skaters were getting older and moving on to other things, so when meetings are needed now, they are advertised at the skate park.

The City of Melbourne Sailyards Skate Park launched its own magazine, SESSIONS. **[14]**

3. Encouragement



So why encourage skating?

The appeal of skating

Skating appeals to young people for a number of reasons, but mainly because as a sport it values the individual, it's a form of self-expression, and it's fun! Other attributes include:

- it requires little routine commitment
- it is inexpensive for beginners and those seeking to maintain skill levels
- it is invigorating and exhilarating — skaters talk of the adrenalin rush
- it is challenging — it requires skills and the mastery of moves
- there are opportunities for enhancement of status and recognition though displays of skill and courage — it can be an avenue to derive peer esteem
- it can be social — you can meet new people or hang out with your own friends
- there are now career paths for skaters:
  - as participants through local, state, national and international competition for both amateurs and professionals, leading to good remuneration
  - as promoters of events, designers of facilities, or in retail, manufacturing, or distribution of hardware and software
- skateboards, BMX, and in-line skates can be used as a form of transport.

Why should councils encourage skating?

Skating and BMX riding have all the typical benefits of other recreation activities (physical, mental and social). There is, however, the added bonus that these activities target a population who often feel marginalised by typical recreation provision, and who are at an age where participation in team sports and physical activity may have started to decline. Skating and BMX riding have added benefits as recreation activities in that they:

- provide good aerobic exercise (particularly in-line skating)
- are not hard on joints (most injuries can be prevented by wearing protective gear)
- have a high peer esteem value for youth, which in turn encourages participation
- unlike many team sports, skating doesn't necessarily come with routine commitments (that many young people say they don't want).

According to a pamphlet available in a retail outlet, during a 30 minute period in-line skating at a steady rate expends on average 285 calories and produces a heart rate of 148 beats per minute. In-line skating produces better aerobic benefits than cycling, but not as good as running. Anaerobically in-line has been shown to be better than both. **[15]**

Strategies to encourage skating

Key strategies to consider include:

- Enhance the image of skating
- Legitimise skating as a sport
- Provide facilities for skating
- Marketing and programming initiatives

Enhance the image of skating

Public perceptions need to change before participation in skating will reach its potential. History tells us that there were good reasons why parents didn't want kids to skate in the sixties when poor design of equipment was the major cause of injury. There is still a perception that skateboarding is one of the most dangerous sports.

However, in 1999 eleven leisure activities had a higher number of injuries than skateboarding recorded through presentations to hospital emergency departments in Victorian (see Table 7 in Chapter 7: Safety and Risk). Interestingly, a decade ago in 1990 there were only three leisure activities in the Victorian Injury Surveillance System data base with higher number of injuries than skateboarding. **[16]**

The perceptions of risk associated with different sports are changing. Research by Jeavons Recreation & Tourism Planners suggests that until recently one major reason for not skateboarding was "parents don't let me". **[17]** A recent survey of children in the City of Casey indicated that considerably more children between the ages of 10–19 were "not allowed" to play football compared to skateboarding. **[18]**

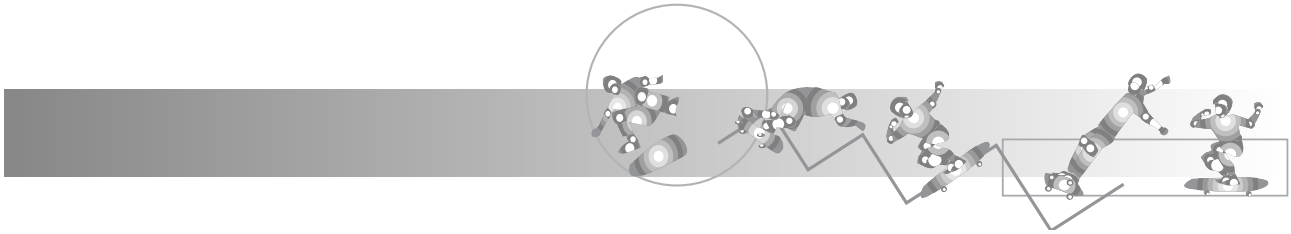
Legitimise skating as a sport

There is a perception by some that skating does not have a large following in comparison to football or cricket and it 'isn't really a sport'. Yet a City of Casey survey showed that participation in in-line skating and skateboarding as a sport (listed separately) was high and that only seven sports had a greater participation.

The ranking was:

1. basketball
2. football
3. cricket
4. netball
5. soccer
6. tennis
7. swimming

This is consistent with the ranking of sports published in the Australian Bureau of Statistics report *Participation in Sport and Physical Activities* (children aged 5–14 years). **[19]** As a very general comparison with other sports, the survey results put Victorian participation in in-line skating on a par with sports such as dancing, athletics, gymnastics, martial arts, rugby league, and softball, but higher than hockey, baseball, touch football, golf, cycling and volleyball. Skateboarding would fall just below these. If the skating codes had the same level of facility provision as the traditional team sport codes, participation rates may be much higher.



Surveys of school children in the City of Casey indicated that lack of facilities were the principal reason given by children as to why they do not participate in skateboarding, in-line skating and bike jumping. This is compared to football for example where the principal reason was "not allowed".

Provide facilities for skating

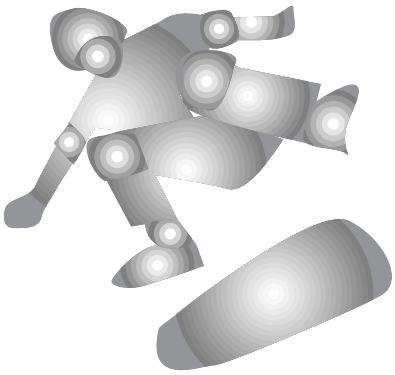
Research in a number of communities suggests that a major reason for not participating in both in-line skating and skateboarding is lack of facilities. Participation rates were in the order of 30 per cent higher where there were facilities. **[20]** Market potential may be enhanced by adding facilities to cater for local participants, especially those with low skill levels, by adding greater variety and flexibility to facilities to balance demand fluctuations and by adding family and commercial appeal. Diversification of opportunities to include indoor family skate parks and camps may help bring skating into the mainstream. However, facilities should be only one element of an integrated plan to encourage skating (see Chapter 4: Skating in the Street).

Marketing and programming initiatives

There are a range of marketing and programming initiatives available that may encourage participation in skating. These might include:

- educating the public about the benefits of skating and enhance its image
- considering the issues associated with skating in the street, road safety and urban planning and design to accommodate skating (see the next section)
- introducing "skate safe" programs to reinforce safe practices and codes of conduct, deal with any community concerns and increase public awareness
- integrating skate activities into mainstream family activities: festivals, holiday programs, after-school programs, "come-and-try days"
- where possible, providing sponsored transport services to facilities
- encouraging community involvement when planning skate facilities, and ongoing involvement after they have been commissioned
- being ready with the facts about participation, injuries, and the social benefits of providing facilities (to combat critical comments)
- advertising skate facilities and programs to help legitimise the product and reach the wider population
- including the activity of skating when undertaking sports planning, forming advisory committees, and compiling databases
- calling on sports personalities and high-profile public figures to champion the cause, and
- considering skaters in all urban planning and design processes.

4. The street



Skating in the street: the challenges

Key issues to consider are:

- Attractions of the street environment
- Road safety and transport
- Policy principles
- Designing skate friendly environments
- Street strategies

Young people will always want to skate in areas not designed for them, either because of the inherent attraction of the street, because there are not enough facilities available, or because existing facilities fail to keep their interest. The more designers make facilities safe and predictable, the more some riders will seek out adventure on the street.

The street: irresistible attraction

Reasons for skaters preferring street terrain include:

- adventure, challenge, the need for risk-taking and to conquer new and difficult terrain
- unpredictability, spontaneity and the excitement that goes with street skating
- proximity and convenience
- peer pressure
- audience — the availability of instant onlookers and spectators.

By recognising that children and young people will continue to want to use paved urban areas, strategies can be put in place to:

- reduce injuries in these areas
- protect vulnerable infrastructure, and
- where necessary, manage the behaviour of skaters or discourage skating.

Skating is a road safety issue

There has been a major increase in the use of small-wheeled or recreational devices as transport in recent years. In addition there has been an increase in the use of roads for skating events and by individuals skating for fitness. Most skating accidents happen on streets and pathways. not in purpose-built facilities. Presentations to emergency departments of hospitals in Victoria suggest that there are more skate accidents on streets or footpaths than anywhere else. The only two reported deaths have been young males crossing the road at night without illumination or protective gear. **[21]** Many skaters use roads and pathway networks for transport, and to get to skate facilities.

At the time of writing, few councils had developed policies responding to skating as a road safety issue. The City of Melbourne has a Sk8 Safe Program. Gippsland councils have a Sk8 Gippsland Program, and the City of Stonnington had the issue of road safety for skaters under consideration.

In the USA a National Skate Patrol was developed in 1992 by the New York Road Skaters Association (NYRSA) and International In-line Skaters Association (IISA) responding to an increased need for park systems to provide basic skills instruction and help skaters coexist with cyclists, pedestrians and other park users. The mission of the National Skate Patrol (NSP) is to provide a service to skaters using public skate ways, whether in parks, on trails, or on roads. NSP volunteers provide free on-the-spot stopping instruction to skaters having difficulty skating in a controlled manner. In addition, they distribute skate safety maps and work with the local police, parks departments, and skate retailers. Many are Certified Instructors and all encourage skaters to follow the IISA Rules of the Road.

Road rules

The *Road Rules (Victoria)* implemented on 1 December 1999, require that skateboards, in-line skates and other wheeled recreation devices must give way to pedestrians on footpaths. Previously there were no restrictions. Skating is permitted on streets with no centre line marking where a speed limit not exceeding 60kph applies (i.e. most local roads). Cyclists are prohibited from riding their bicycles on footpaths unless the rider is under 12 years of age.

Victorian road rules

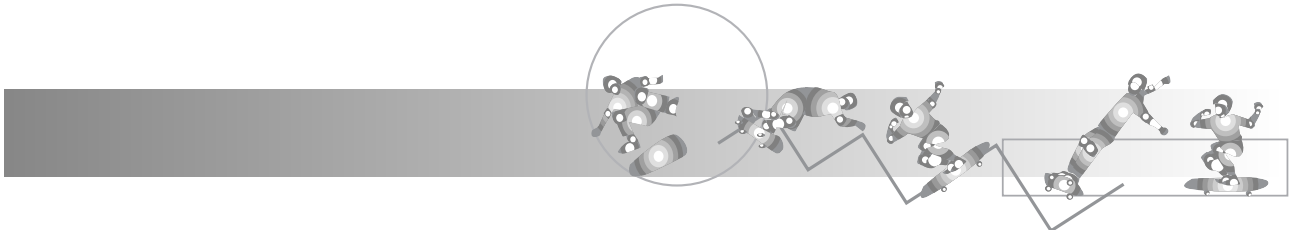
It is an offence:

- for persons on rollerblades or rollerskates to fail to keep out of the path of a bicycle on a bicycle path or separated footpath
- to travel on rollerblades or rollerskates on the pedestrian side of separated footpaths
- to travel improperly on a road in or on a wheeled recreational device
- to travel in or on a wheeled recreational device on a prohibited road.

Policy principles

There is a general need to accept skating as a legitimate form of transportation. There are considerable benefits to users and to the broader community of encouraging skating in the street for recreation and as a means of transport, but because of the vulnerability of skaters using roads, there is a need to regulate such use.

The needs and responsibilities of all parties must be considered in order to minimise the risk of injury while increasing opportunities for skaters to enjoy their sport, as well as minimising the conflicts between skaters and other road and path users. The needs of skaters as key users of public places, roads and footpaths should be integrated into urban design and planning processes.



The Australian Capital Territory Government produced a small wheeled transport strategy with a sound set of principles to guide policy. **[22]** *An inquiry into the use of skateboards and in-line skates near shops in the ACT followed.* **[23]** *It did not recommend legislative action but rather that an educational and co-operative approach be taken, in the belief that young people should be given an opportunity to work with other members of the community to find solutions to problems. The report recommended an expansion of the Civic skate facility and development of one other, the trial of go-slow zones, the development of a code of conduct, and implementation of a community education project. The inquiry noted that if facilities do not meet the needs of young people then go-slow zones and a co-operative approach are likely to be less successful.*

Designing skate-friendly environments

The two key issues are:

- Conflict between pedestrians and other street users
- Damage to infrastructure

There are some good examples where the needs of in-line skaters have been integrated into urban design, including the planning of public spaces, especially foreshore promenades. However, there are few examples where urban design actively encourages skateboarding.

The main issues councils deal with are conflicts between skaters and pedestrians on the street and the inadvertent damage to urban infrastructure from use by boards, blades and bikes.

The City of Ballarat built a skate park in a central location with high visibility. It has strong support from the local community and has had a significant impact on drawing skaters away from shopping centres.

The City of Port Phillip has embraced the high use of the municipality by skaters, particularly in-liners, through a supportive campaign. This includes:

- *A shared arrangement where skaters are encouraged to use designated paths with cyclists. (These cycle and skate paths are separate from pedestrian paths).*
- *Signage indicating skaters are legitimate users of paths.*
- *A safe blading program which includes a brochure (and was initially noted for a skate patrol — people on skates mingling with skaters on paths to encourage safe skating).*
- *A cleaning regime to ensure paths are kept relatively debris free, including the removal of palm fronds from foreshore pathways.*

Planning for skating activities is now an integral element of master planning. The design of physical works to meet the needs of skaters includes extending the beach promenade west through Beacon Cove and beyond, and separation of pedestrian and cycle paths by medians. A skating area at Marina Reserve will be also be designed as a node to integrate the needs of path users and onlookers. It will include a purpose-built facility for skaters, catering for a range of proficiency levels.

In the redevelopment of the Geelong waterfront, the City of Geelong consciously sought to accommodate skaters by including in the design brief a requirement that the surface be suitable for skating. But levels of use of the waterfront by skaters exceeded all expectations. Skater use of architectural features along the waterfront not only caused damage to some structures but concern arose for public safety as skaters launched off elevated structures into the path of pedestrians. The council is seeking to manage skate behaviour through the introduction of appropriate regulations as a way of controlling skating on these structures.

Conflict between pedestrians and other street users

Many councils use local laws as their principal tool to reduce potential conflict between pedestrians, shoppers and skaters in busy urban areas. Most prohibit the riding of skateboards in designated areas. There is little hard evidence to suggest these are effective unless introduced along with other measures such as the provision of skate parks, codes of conduct and skate safe zones developed in conjunction with skaters. Such local laws also need to be enforced.

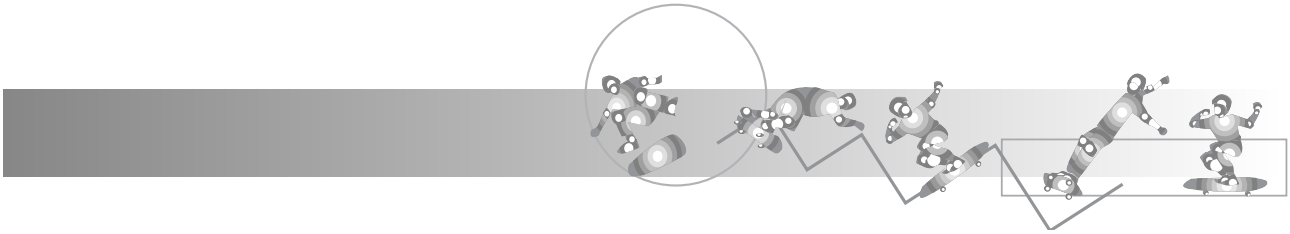
Urban design and planning

Grinding can damage the edges of buildings, stairs, sculptures, seats etc. There are methods of protecting vulnerable infrastructure from damage or alternatively ways of discouraging this behaviour in specific places through design. Some councils have been pro-active in protecting the edges of such structures attractive to skaters by ensuring they are durable enough to cope with such use (for example providing brass angle edges to steps and bollards). Other councils have ensured basic grinding, sliding and ollies are provided for skaters in local parks as well as in purpose-built facilities, in order to reduce the need for skaters to use street furniture and structures for these activities.

The City of Melbourne prepared a management plan for skating in the CBD addressing:

- *provision of a skating venue*
- *nominated access routes through the city*
- *introduction of a code of conduct*
- *education and information programs involving the skate industry*
- *development of physical measures to inhibit skating or slow skaters down in public places*
- *infringement notices for reckless and unsafe behaviour and damage to property.*

The City of Warrnambool has facilitated skating not only through the provision of new purpose-built skate facilities but through the development of a significant foreshore promenade. The promenade extends from the breakwater to the flume and will extend all the way to the mouth of the Hopkins River. The promenade follows the natural undulations of the dunes to create diversity and interest for pedestrians, bikes, blades and boards. The surface of the path will predominantly be cement but also may include areas of timber. The urban design and planning process will include community education and protocols for behaviour to minimise any conflict between users. A local law has also been passed to ensure dogs are kept on leads.



What shopping centres and urban designers can do

Skate facilities can be provided successfully in central locations. Good examples include the City of Melbourne's Sailyards skate park and the Civic skate park in the heart of Canberra's shopping precinct. Strategies may include:

- providing facilities or designated areas so young people can skate in central town or city locations
- looking at the whole issue of the sport rather than isolated incidents
- involving skaters, traders, and other stakeholders in talking though concerns
- negotiating a plan and a code of conduct
- providing kick plates on the bottom of glass doors or walls to prevent breakages and injury (because even if skaters aren't supposed to be there, protective measures are important)
- providing metal edges on stairs, sculptures and other street furniture to protect them from grinding
- slowing skaters down in areas where conflict may arise and discourage skating in inappropriate areas by using textured or raised patterns in pavement, or steel plates (elevated by 10mm) between or extending above pavers.

Measures introduced by the City of Melbourne to inhibit skating or slow skaters down in public places include:

- *installing stainless steel slats over bluestone blocks*
- *installing slats or grooves in joints of blocks*
- *carving out the edges of handrails to provide a bevelled edge*
- *installing stainless steel edges raised along edges of blocks*
- *providing stainless steel capping around edges to prevent riding on fixtures and blocks*
- *providing checkerplate around bluestone blocks in the pavement*
- *providing braille tiles in the pavement*
- *providing raised panels in the pavement*
- *providing weld tiles in pavement*
- *providing brass edges to steps and bollards at the top of steps*

Some facilities have been sponsored by retailers in order to discourage skaters from using the shopping centres (e.g. Waurn Ponds Skate Park in the City of Greater Geelong).

Street strategies

In summary, the key issues to deal with street issues are:

Discourage children from using roadways, in favour of using shared pathways

Up until a child is at least 12 years old, neither their sight nor their sense of judgement is developed well enough to make rational decisions about mixing safely with traffic. **[24]**

Develop bike and skate lanes on key roadways

Where no suitable paths serve a skate park, consider developing dedicated lanes on key roadways. Paint with skate and bike symbols and sign appropriately.

Develop road safety strategies that specifically consider skaters (and BMXers)

Skaters and BMX riders will benefit from road safety strategies and skate safe programs directed at existing and potential skaters.

Legitimise skating on pathways

Sign pathways with a skate symbol in addition to pedestrian and bike symbols.

Develop a strong network of pathways and promenades

If sport and recreation facilities, schools and community facilities are well linked, councils can encourage skaters to use them instead of roads. Promenades along foreshores can also encourage leisurely and social skating alongside strolling and cycling.

Integrate the needs of skaters into urban planning and design

Consider the needs of skaters in master planning and urban design exercises. Design areas to minimise conflict. Encourage the involvement of shopping centre management and the community sector in skate facility provision.

Design skate-friendly environments

Harden edges and add protection to vulnerable structures and fittings (e.g. glass doors).

5. Planning

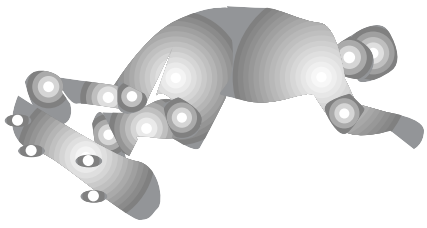
Planning a skate facility? Read this first ...

So why have 'em? The argument for building a skate park

Planning is a conscious process to bring into being something that may not otherwise happen. In the long run a plan (it doesn't need to be a major exercise) can save time and money. Remember, providing a purpose-built skate facility does not mean skaters will disappear from streets and other public spaces. At the end of the process the best measure of success for any skate park will be that it is well used. Although there may be local variations in participation, overall there is a strong demand for skating facilities from an increasingly broad range of age groups.

- It may be cheaper to provide a skate park than facilities for cricket or football, indoor court sports or swimming, in terms of recurrent and capital cost.
- Research suggests that one major reason for not participating in both in-line skating and skateboarding is lack of facilities. Participation rates have been estimated to be up to 30 per cent higher where there are facilities. **[25]**
- Potential conflict between skaters, pedestrians and cyclists can be minimised in areas not specifically designed for their use (e.g. shopping centres).
- Skateboarding, in-line skating and BMX riding are effective activities to increase the physical fitness of young Australians.
- Skating is popular in the age groups 14–19 years — the age group when children often leave team sports when other pressures on their time intrude (e.g. social, employment, study commitments) and their fitness levels may decline. **[26]**
- Equipment designed for the older skater can fill a playground design and activity void. While the value of play equipment in child development is well documented, it is rare to find equipment suitable for children over 10 years old in public open spaces.

Key questions



- What is the overall strategy?
- What can you afford?
- How will facilities be distributed?
- What catchment will they serve?
- How are local participation rates calculated?
- Where will facilities be located and sited?
- Are development approvals required?
- Who will manage and maintain the site and how?
- How will we involve, skaters, residents and others?
- Who will champion the cause?
- Troubleshooting

After big picture issues have been clarified, it is useful to examine existing planning processes and determine what needs to be put in place to ensure a smooth transition from goal to reality. Also, a brief look at common problems encountered by others who have embarked on the process of building a skate park may pay dividends.

What is the overall strategy?

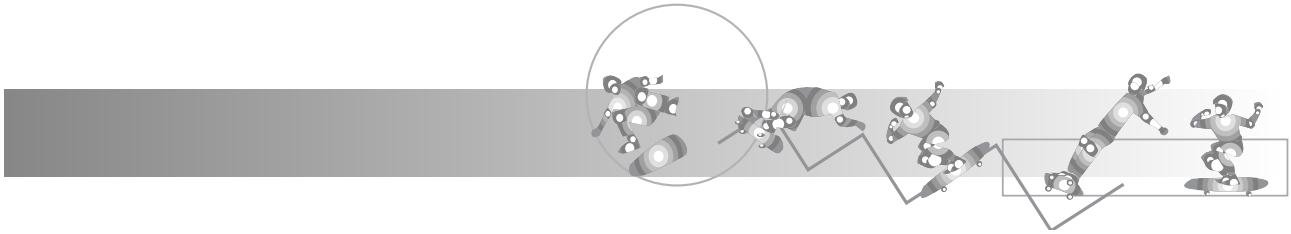
It is important to develop a clear strategy for the provision of skate facilities. This doesn't mean sophisticated documentation, just a conscious choice about the desired outcome and agreement on the how, what, why, where and when of skate park provision.

A plan can be very powerful. It can harness the energy of interested parties and encourage communities to work together in a co-operative way to achieve agreed goals. Without a plan the available energy may be wasted and outcomes diminished.

A strategy may also mean quicker decision-making and the ability to better capture funding opportunities. It should also help to make the whole process much more satisfying for everyone involved. A strategy would generally include:

- careful analysis of demographic factors, skate participation rates and an assessment of demand
- a study of a council's objectives and position (support and resourcing) with respect to skating in comparison with other sports, including provision for the various segments (skateboard, BMX, in-line) as well as other roller sports
- how to cater for riders with differing levels of proficiency
- the type of catchment that facilities should serve (i.e. regional, local or neighbourhood), whether they should be indoor, outdoor, temporary, or transportable, and what mix of these is appropriate
- distribution of facilities and their location
- how facilities will relate to the catchment they serve and what impact that will have (e.g. will car parking be needed?)
- whether supervised programs will be provided, as this may influence facility design (fencing etc) and the ability to generate income
- the order of costs to be allocated for facilities over their whole lifecycle — planning, design, management, upgrade, retrofit, and evaluation
- processes to involve residents, skaters and other stakeholders in the planning, design and management of facilities
- consideration of how and by whom facilities will be managed.

The City of Casey prepared a skate strategy before developing any further outdoor facilities. It looked at a number of factors, including skating in comparison with other sports, current participation rates, and demographics. The strategy recommended The Shed, an indoor facility in Cranbourne, be retained as the peak indoor regional facility and that it be complemented by several local and satellite venues and, in the short term, existing mobile facilities. A cost plan, design and management options for three local and satellite facilities were also provided. **[27]**



What can you afford?

Cost planning

Skate facilities, like all other assets, should have a plan to ensure sufficient funds are allocated not only for adequate maintenance over their entire product lifecycle, but also for upgrades in response to product demand and replacement when they become economically or functionally obsolete. This cost planning needs to occur at the time of committing capital funds, prior to construction. The product life of outdoor skate facilities is short (similar to play equipment) and likely to be in the order of three to five years, after which modifications, additions or redevelopment may be necessary. Consider the following in a cost plan:

- initial capital cost, including support facilities, landscaping and utilities
- cost of regular maintenance and cleaning of the facility and surrounding areas
- education of users, marketing and promotion and the provision of programs or events
- minor upgrades and product improvements to continue to satisfy need (probably every three to five years)
- product evaluation and a review of the strategy every six or so years
- consultation and communication with users and the industry.

Entry fees

Acceptance of fees is dependent on perception of value. Research by Jeavons Recreation & Tourism Planners indicated that in one municipality about 50 per cent of skaters were happy to pay fees for the use of an indoor centre (of this group, about 80 per cent were happy to pay up to $4).

In several instances where a single ramp has been provided inside a swimming pool, and skaters have had to pay a fee to use it, there has been considerable opposition. However, there appears to be general acceptance of the level of fees paid at The Shed in Cranbourne (City of Casey) where memberships are also offered.

The City of Frankston initially had a good income stream from the vending machine placed at one of their skate parks. However, eventually it suffered from damage by outsiders and had to be removed.

Benicia, California's famous public skate park, was designed to have more than one use. It is set up so the central platform can be used as a stage (for bands etc) thus making the park flexible, popular, better used and more financially viable.

Other sources of income

The advantages of gaining income from a park should be weighed against the logistics and cost of collecting and handling money. Similarly, the benefits of commercial arrangements should be weighed against the costs of meeting obligations (legal and otherwise) and also the desirability of such arrangements. Consider the following:

- fees and memberships
- hiring out the park for events, demos, competitions, gigs, skate-a-thons, come-and-try days etc
- vending machines and concessions — including equipment, tee-shirts, refreshment sales and tuition
- sponsorship and naming rights

- programming opportunities
- grants.

However, if your skate park is sought after for events, the following questions may need to be addressed.

- What is the council's policy regarding the use of facilities for the staging of events?
- Are promoters of the events making large profits but only paying a token hire fee?
- Are they contributing to the cost of wear and tear on the park?
- Are there many occasions when locals can't skate because events are on?
- Has the need for (and impact of) amplified sound (for commentary etc) been considered?
- When sponsors have become a necessary part of events, how far can (or should) their needs be accommodated in terms of products, signage etc?

The City of Frankston has a set of City Events Objectives. These include:

- *to develop events that showcase Frankston's unique attractions*
- *to develop niche market events complementary to the community and which have a broad appeal to visitors to the area*
- *to provide the community with a variety of events scheduled throughout the year designed to suit all ages.*

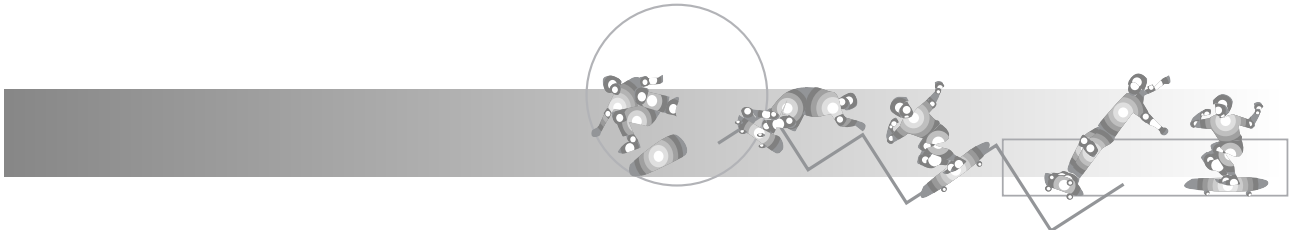
How will facilities be distributed?

An analysis of existing and projected demographics and participation rates (see Chapter 2: The Market) will provide a good indicator of areas most in need of facilities and therefore likely to sustain skating over the next 5–10 years. This data, along with access and equity policies, should inform council decision-making about how many skate facilities need to be provided and where.

What about type and mix of facilities?

Consider the following questions:

- Where is the demand, who is catered for elsewhere, and who will you target?
- Can you use and integrate existing facilities?
- What cost-effective and easy solutions are available? (Instead of constructing a new outdoor facility, an old factory space for indoor use may be easier to fit out and be equally beneficial in the long run.)
- Can you provide a regional skate park, facilitate a private facility, or provide a major outdoor in-ground skate park?
- Are you in the business of catering to all market segments (in-line, BMX and skateboards)?
- How will you serve the outlying areas: mobile ramps? indoor recreation centre programs? occasional events, clinics and programs?



What catchment will facilities serve: regional, district or neighbourhood?

It is useful to grade facilities according to the market they serve: regional, district or neighbourhood. For example, The Shed is the only major indoor facility in Victoria and is considered regional because a large proportion of users travel from outside the local municipality.

The larger and the more highly regarded the skate park, the greater distances people will travel. If you provide a large, high-quality facility in a small local park you may create the potential for inappropriate use or even conflict between users. Hence, catchment type has a bearing on where to locate the skate park and the support facilities needed. Therefore, transport issues need to be considered, especially where public transport is limited. If a regional skate park is being planned, this also has implications for ancillary services, such as car parking.

Economic benefits may flow from playing host to a regional skate park, but extra infrastructure and management costs may be incurred and unwelcome competition between locals and outsiders for access may arise. Provision of regional facilities will not be appropriate for all councils because of the cost or due to the presence of existing regional facilities. However, limiting provision to small, local level facilities may mean constructing more of them to meet the needs of the whole population.

The needs of the target market should be a primary consideration when determining a distribution strategy, as well as what the community expects in terms of standards of provision. For instance, in rural locations there is generally a lack of hard surfaces to skate on, and while the market may be smaller and willingness to travel greater, the need for local facilities may be higher.

A distribution strategy for a skate park should address these issues in the same way they would be considered for the establishment of more traditional sports facilities:

- each catchment level should be distinguished by locational criteria, the type and characteristics of user, and level of competition
- all facilities should cater for low levels of proficiency — in addition to other levels
- issues of social opportunity and peer group acceptability should be considered in design and site selection.

The City of Casey adopted a strategy to provide one regional indoor skate facility for aggressive skaters, one indoor hockey and roller sports centre and two outdoor local facilities, plus several satellite skate facilities as well as continuing to use the existing mobile ramps. The strategy includes a cost plan for the provision, management and future improvement and planning of facilities.

Wyong Shire (NSW) has three skating objectives:

- *to provide street-style facilities for youth*
- *to meet the need for both quality district facilities and low cost accessible neighbourhood facilities within a limited budget, and*
- *recognising that trends will alter, to provide facilities that can adapt to meet changing needs.*

At the very local level, basic standard, inexpensive items are placed in neighbourhood parks to allow skaters to grind, slide and ollie. These components may cost as little as $350 but still minimise damage to street furniture. At the district level, sites are more complex, with one regional facility provided in the shire. Older concrete half pipes have been integrated into new parks, as well as precast components developed in collaboration with local skaters and a local concrete construction company.

In order to manage the high level of requests for skate facilities, the City of Greater Geelong adopted a strategy to provide regional, sub-regional and local facilities across the city. Local facility zones were identified to meet community needs. This is supported by the provision of mobile facilities which are co-ordinated through the council's youth services department.

How to calculate local participation rates

- Conduct a survey
- Estimate numbers using the rule of thumb

It is not difficult or costly to determine participation rates in skating and BMX riding for a local area. One option is to undertake a survey.

Conducting a survey

Here are some tips on conducting a survey.

- Source children through local schools where a wide sample of children from different ages and backgrounds can be found.
- Sample at least 500 children with a relatively equal number in each age group.
- Where possible use a recreation planner or market research professional to design the questions and complete the analysis.
- Avoid leading questions: don't call it a skate survey or say its purpose is to determine the demand for a skate facility because this may inflate the numbers; don't ask if they would like a skate facility or it might create expectations and skew results.
- Ask children what sports and recreation activities they undertake regularly.
- Ask which ones they would like to undertake but can't, and why.
- Ask whether they own a skateboard, BMX bike or in-line or roller skates.
- Ask how often they do these activities and include the option of "never".
- Ask children their age, gender and any other demographic information required — but at the end of the questionnaire.
- Then ask any other questions needed to serve your purposes.

Do-it-yourself estimates

If you are not able to conduct a survey to establish likely participation rates, use the following table to work out a 'rule of thumb' estimate for numbers of skateboarders in your municipality. (Insufficient detail was available to provide a 'rule of thumb' estimate for in-line skaters or BMX freestylers.)

- Insert the population for each of the age groups (column 2) for the area or municipality.
- Establish whether there is an existing facility and therefore whether to use the participation rate for areas with or without a facility (column 3 or 4).
- Multiply the population for each age group by the chosen participation rate in column 3 or 4 (depending on whether you have a facility or not) and enter the figure in column 5 to arrive at an estimate of numbers of skateboarders in each age group.

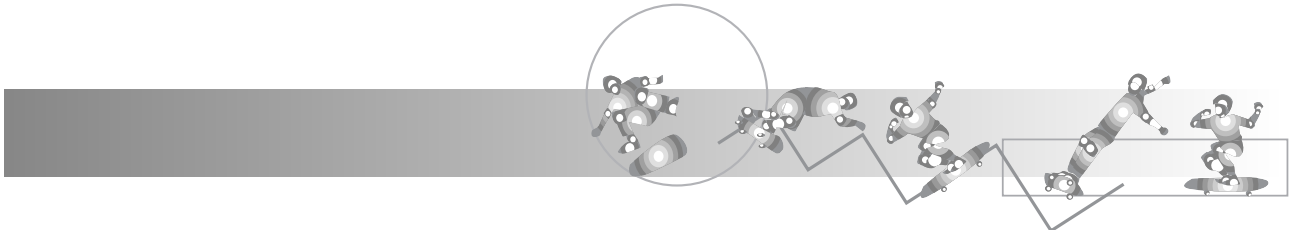


Table 6: Do-it-yourself estimates (skateboarders)

Column 1	Column 2	Column 3	Column 4	Column 5
Age in years	Local population	Participation rates with facility	Participation rates without facility	Number of skate boarders
5-9		30%	25%	
10-14		45%	35%	
15-19		15%	10%	
20 +		<1%	<1%	
Total				

Where will facilities be located and sited?

Before looking for a site, develop selection criteria:

- build in any local issues which have arisen
- ensure that criteria are devised in conjunction with, and agreed by, a wide range of stakeholders, including skaters, and
- start with a general location (e.g. North Skateville) then select site specific criteria (e.g. next to recreation centre on the west side of North Skateville's Football Park).

The City of Boroondara used a detailed selection matrix of approximately 22 weighted criteria to select the site for their new skate park, including that the site be central, prominent, accessible to those without transport, and close to a telephone, as well as taking into account land status (whether the site was council land, suitably zoned etc).

Location checklist

- ☐ Existing and projected age of the population is largest for 10–19 year olds (or 8–24 year olds).
- ☐ Located where young people want to be, or adjacent to where they congregate.
- ☐ Where a major community hub or central area with undeveloped land (either council-owned or Crown land) is available, is being recycled, or has low value for other users (e.g. under freeway fly- overs).
- ☐ Easy access to public transport (preferably train — especially if BMX provision is planned).
- ☐ The catchment (regional or local) matches the proposed facility.
- ☐ Co-location or partnerships with existing shopping centres, sport or recreation facilities, or interested schools may be possible.

Siting checklist

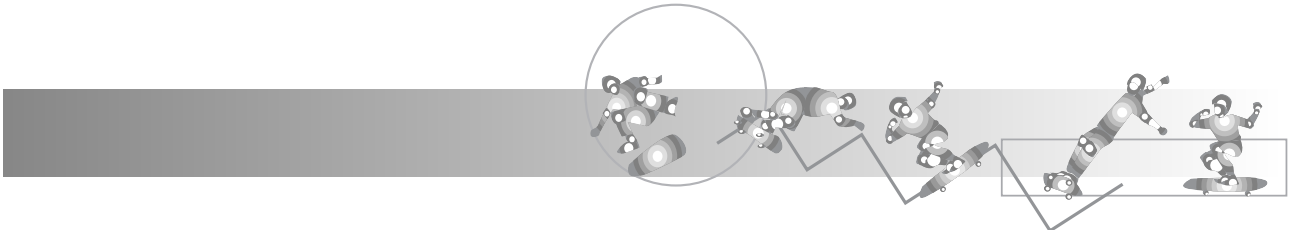
- ☐ Suitable planning scheme zone.
- ☐ Suitably sized (allow for expansion, and space for parking if a district or regional skate park).
- ☐ Suitable soil, slope and environmental conditions.
- ☐ Emergency vehicle access (fire and ambulance).
- ☐ Visually prominent, pleasant site with good public surveillance for safety and high marketability (e.g. for obtaining sponsorship).
- ☐ Associated amenities, such as a telephone, toilets, water, shelter and shade are available or cost-effective to provide.
- ☐ Adequate distance from residential dwellings and incompatible land uses (i.e. avoiding noise and light intrusions).
- ☐ Where there will be minimal conflict with other users (e.g. pedestrians) or other sports (e.g. netball).
- ☐ Suitable to fence if required (e.g. where a skate bowl is sited).
- ☐ Served by an off-road shared bicycle path network or route.
- ☐ Not too close to a busy road.
- ☐ Restricted access to vehicles to prevent skating at night by car lights.
- ☐ Free access to users and spectators.
- ☐ Close to shops selling food and drink.
- ☐ On a local circulation route.

Are development approvals required?

Legislation and regulations

A number of Acts of Parliament may affect the development of a piece of land (in addition to due planning processes that must be followed) including:

- *Planning and Environment Act*
- *Planning and Environment Act Regulations*
- *Local Government Act*
- specific *Lands Acts*
- *Crown Land (Reserves) Act* (if the site is Crown land)
- regulations governing activities on certain types of land (e.g. Regulations in National Parks).



"Never assume that what you intend to do is so minor or inconsequential that you will not need a planning permit: even the erection of a garden shed requires a permit in certain circumstances." **[28]**

Planning permits take time. An application must be advertised for a minimum of 14 days and objectors have 21 days to appeal. If they are successful, the applicant then has 60 days to appeal the decision.

Amendments can be made to planning schemes after due reporting and consultation processes have taken place. However, changes must be approved by local government and the Minister for Planning.

Ownership

Who owns the site? This may determine who needs to be consulted, who administers planning controls, and thus what planning and approval processes will apply.

Reservations

If the proposed site for a skate park is a reserve, the purpose or nature of the reservation may influence what development is allowed, and any development approvals required.

Zoning

The zoning of the piece of land under a local planning scheme may influence whether a skate park development is allowable under the zone, whether a planning permit must be sought and what other policies, controls or conditions may apply to development. There may also be codes or guidelines identified in planning schemes for that area.

Encumbrances

The title of the land will indicate any covenants or easements that may affect its development as a skate facility.

Other plans

A local council may have adopted policies, master plans, and development plans that will affect the development of a piece of land. Also, there may be other planning authorities that must be consulted (e.g. VicRoads if the development affects a road, or the Environment Protection Authority).

Required consultation

Plans for some developments may need to be advertised to the public for a specific period prior to approvals being granted by the responsible authority, to enable persons affected by the proposal to submit objections. If there are objections to the proposal there will be delays while these are considered. There may be opportunities for objectors to lodge appeals and some cases may go before the Victorian Civil and Administrative Tribunal (VCAT). Appeals can be lodged within 60 days of the decision on the application being made, hence these cases may cause the time frame of a skate park development to be significantly extended. A review of cases before the Administrative Appeals Tribunal and the VCAT found few relating to the provision of skateboard facilities. The following are three examples.

- Objections were made to the provision of a skate bowl at Venus Bay. The tribunal ordered that the permit be granted subject to the following being submitted: a site plan with the exact layout and location of the

bowl (not encroaching within 22m of the southern and 40m of the eastern boundary), the location of a sign clearly stating the site was not to be used outside certain hours, and a landscape plan.

- Triabunna District High School (Tasmania) appealed against development of an area of a recreation reserve to include a skateboard facility. It was agreed that the skateboard facility would be deleted from the plan and that the council would endeavour in conjunction with the school, to find a more suitable site. **[29]**
- A case in South Australia concerning the development of a skate facility in the City of Prospect focused on whether the facility constituted a "structure" or a "building". If defined as a building the council was required to seek development authorisation to legally undertake the proposed work on the reserve. The judgement heard that the 'two quarter-banks and a slider' could not be excluded from the definition of a structure and therefore was not a building. The case then turned to whether the proposed facilities constituted play equipment. The case concluded that the skate facilities could be play equipment and therefore did not require development approval. **[30]**

If consultation does not occur in time, or if it proves unproductive and a dispute arises with opposing positions becoming entrenched, one option is to seek the assistance of independent mediators. The Dispute Settlement Centre of Victoria, run by volunteers, offers a mediation service. Call 03 9603 8370.

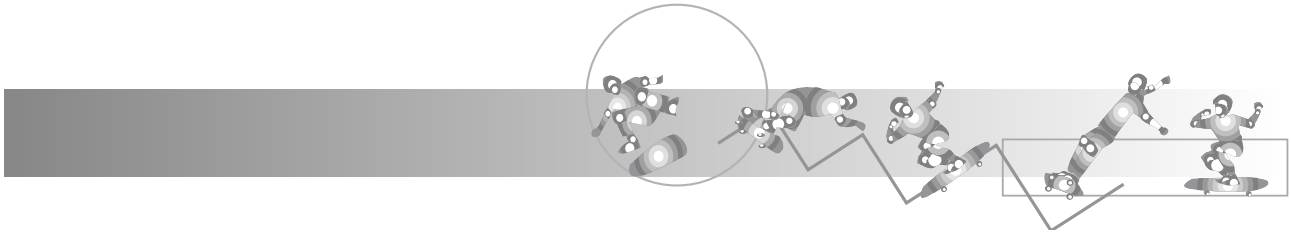
How will they relate to adjacent facilities?

Opportunities for co-location: who looks after whom?

General public surveillance is likely to increase as a result of co-locating a skate park with another community, sporting or recreation facility, thus enhancing the safety of participants. Co-location may also allow more formal supervision and generate other mutual benefits (e.g. economies of scale, storage of basic equipment such as brooms, and new opportunities for partnerships). The placement of facilities in conjunction with swimming pools and recreation centres has not only meant people are close by in case of emergencies, but also quicker (and more cost-effective) inspections and reporting of hazards. A facility for boards, blades and bikes adjacent to a roller hockey venue may allow the development of a headquarters for skating codes, sharing of facilities by clubs and greater participation.

Consider the shared interests of users. A skate park adjacent to a dirt jump trail for BMX may allow amenities to be shared, increase the use of both, and attract events. A skate park adjacent to a surf club may provide an activity when there are no waves, and enhance supervision. If co-location is an option, consider the following points.

- The needs of skaters should not be outweighed by the objectives of the adjacent facility — these need to be clear, equitable and agreed upon.
- Facilities need to be operationally compatible: with a skate ramp inside a pool enclosure opening hours may become a critical issue.
- There may be the option of varying existing management contracts for a leisure centre or swimming pool to include general skate facility supervision and inspection responsibilities.



The City of Greater Dandenong had a skate ramp in a pool complex. Charging an entry fee (the same entry fee as the pool) caused some concern, as did accessibility to the ramp when the pool was closed. Consequently, the fence was damaged by people trying to get in. Supervision and maintenance of the ramp was not the responsibility of the pool management, and the fence around the ramp was removed.

A regional facility set into a regional park, Tuggeranong skate park, is a good example of a facility well integrated into the landscape. It is positioned adjacent to the Lakeside Leisure Centre, Tuggeranong Town Centre and other recreation opportunities, including picnic and playground facilities on the shores of the lake.

Who will manage and maintain the site and how?

Key issues

- Supervision
- Relationships with other centres or skate facilities
- Running or supporting clinics or events
- Maintaining the site
- The role of users and the community
- User behaviour

Management issues have an impact on infrastructure and therefore need to be thought through prior to developing the design brief. In order to be successful, management must have the capacity to engage and involve young people. This requires a degree of flexibility. Leisure behaviour in young people is commonly characterised by the need for risk and challenge, a search for meaningful social opportunities (ambience, peer groups and subcultures) and the need for variety to meet demand fluctuations.

The City of Boroondara is planning to supervise their new skate facility, at least initially, from 2pm to 7pm week days and 1.30pm to 9pm on weekends.

Supervision

Cost is the major issue in deciding whether a park will be supervised. The benefits of supervision include the ability to:

- provide a safe, controlled environment to learn, i.e. informal advice, instruction and intervention (especially for beginners)
- provide and enforce use of protective gear
- monitor use, design and condition of the park
- involve skaters directly in management tasks
- identify and quickly rectify minor hazards
- manage other routine tasks, such as cleaning
- provide first aid and call for emergency treatment

- oversee programs and communicate with skaters
- require users to sign waivers before use (see also Chapter 8:Skaters).

Supervised facility checklist

- ☐ All staff hold current first aid and CPR qualifications, have appropriate job descriptions and can demonstrate (or receive) appropriate training.
- ☐ Hours of operation suit potential users and are not limited because of cost.
- ☐ Skaters are required to sign registration and waiver forms before participating. If participants are under 18 years of age, parents or legal guardians are required to indemnify the council for any damages suffered by participants. **[31]**

Relationships with other centres or skate facilities

The benefits of siting a skate park in proximity to, and association with, another sporting or recreation facility may include:

- sharing of associated amenities (e.g. toilets, parking)
- increased informal surveillance
- joint maintenance (e.g. cleaning and inspections)
- joint management (administration, marketing, supervision and programming).

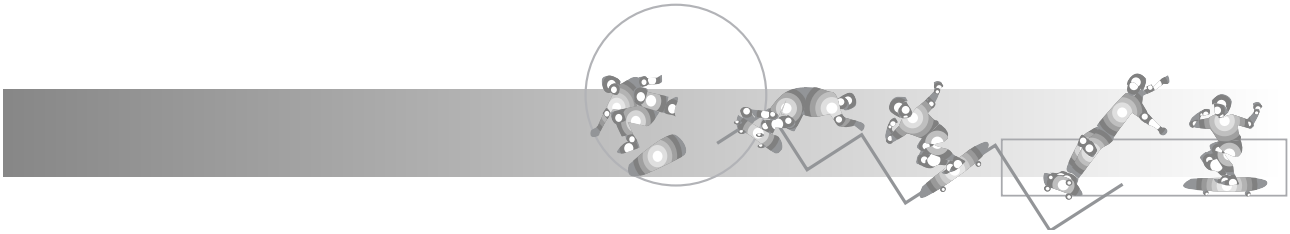
Bass Coast Shire has varied its leisure centres management contract with the YMCA to include some responsibilities for supervision and inspection of Wonthaggi half pipe and Cowes skate bowl. Supervision will be for four hours per day and eight hours on the weekends. The YMCA will also encourage the formation of clubs and arrange various activities for skaters.

Running or supporting programs, clinics or events

Programs and events will increase the range of opportunities available to skaters, increase the age range of skaters, reduce the risk of injuries through education and skill development, and probably ensure that skaters participate longer by being able to develop skills, networks and careers. But if there is an opportunity to run programs and events this has a bearing on the type of facility built. For example:

- mini ramps probably allow the greatest depth in competition for riders of all proficiencies
- extra storage space allows additional equipment to be provided
- amenities, such as public toilets and power, allow programs and events to be staged successfully (e.g. there are marketing advantages if amplified sound is available and the site has the capacity to cater for large crowds)
- allied concrete areas can be used for tuition, roller hockey for beginners, 'demos', more events for BMX (e.g. flatland) and a range of other programs to balance and complement aggressive skating and BMX style activities.

Risk management issues need to be considered prior to staging programs, clinics or events (see Chapter 7: Safety and Risk).



Events don't have to be just for the elite. Competitions can be organised so everybody participates. Some skate competitions include games: roller ball, 'chasie', roller rugby etc. Use the whole park, and put the focus on fun — for participants and spectators.

The City of Kingston has formulated an Event Funding Policy based on the following principles:

- *Events held within the municipality add to the quality of life of local residents.*
- *Provision of opportunities for expression of skills and involvement in community life benefits the individual and thus the larger community.*
- *Events attract a large number of people to the area who spend money on a variety of activities which benefits the larger community.*
- *The municipality benefits from the promotion of Kingston on a regional, national or international level through hosting events.*
- *The council and the community have contributed significant capital investment in the provision of high-quality facilities capable of hosting major and community events. Events can provide an opportunity for economic return on capital investment.*
- *Community-based organisations are best placed to organise and run events to benefit the communities of Kingston.*

Key management options

- Councils
- Incorporated community groups established for that purpose
- Recreation facility management contractors, or clubs and associations responsible for neighbouring facilities
- Youth advocacy groups or community agencies

Maintaining the site

Whatever management option is chosen, a skate park advisory and support committee could make a useful contribution. Also, specific maintenance tasks (cleaning, graffiti removal, inspections, rust proofing etc) may be contracted separately from the overall management of the facility.

One in all in?

If a council has a range of skate facilities (particularly indoor and outdoor), there may be advantages in having one management entity responsible for all skate facilities in the municipality. If specific objectives are developed to guide activities, such an entity may:

- create economies of scale
- ensure that facilities complement each other rather than compete
- develop closer ties with the community (especially if the management entity is not locally based)
- allow the service to be varied, thus providing a better palette of opportunities to suit boards, blades and BMXers across the municipality.

Management tasks

Supervision, programming, marketing and promotion, maintenance and safety inspections, as well as cleaning are common management tasks. Some parks also undertake a youth outreach role.

Cleaning is an important task that is governed by the type of facility and its surroundings. Frequency and type of cleaning may vary from site to site. Any facility where people congregate needs a planned approach to rubbish collection and toilet cleaning in the same way as any other sports facility, as well as:

- regular sweeping of each site
- measures to encourage users to take responsibility for some cleaning tasks
- dedicated cleaning equipment (e.g. brooms) stored nearby and readily accessible to users during the day.

The Burnsville Skate Park, Inc. is registered in Minnesota as a non-profit organization. Its primary purpose is to act as a governing board made up of parents and youth who are active in skateboarding, in-line skating and bicycling. This group will be responsible for establishing operational, safety and financial policies for the skate park with assistance and guidance provided by the City of Burnsville.

The role of users and the community in management

The degree to which users are involved in management can vary from occasional meetings with skaters and BMX riders when issues arise, to nominating one user as a representative on a management committee. Alternatively, skaters may be employed on staff or a park may be managed by a not-for-profit organisation founded by users. What works in one community may not work elsewhere.

Whether participants play an advisory or a direct management role, it is important that the role is a meaningful one and that it has been thought through. The same applies to involving adjacent residents and the broader community in the management of facilities. Many people will have opinions, especially if the skate park is close to houses. What is important is that opportunities are available for the community to be involved, in both formal and informal ways. By canvassing local opinion, local interest can be harnessed and used to good effect.

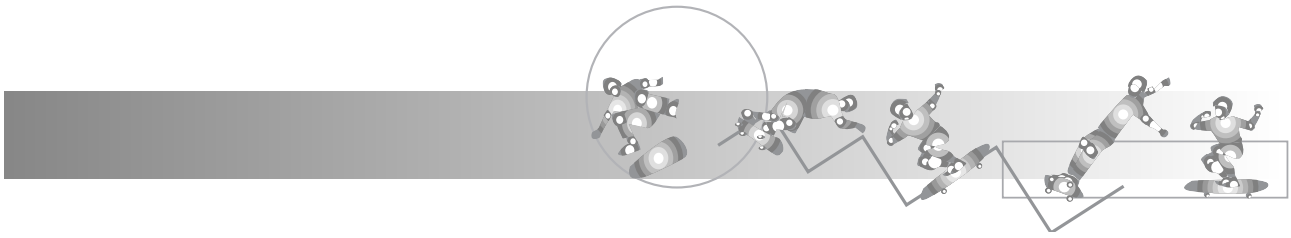
The Shire of Indigo used START funding from the Department of Justice for workshops with skaters, facilitated by a professional skater. These reinforced positive behaviour, planning and skate skills. The grant also covered the transportation of participants to the workshop.

The City of Frankston provided music to skate by at its Frankston skate park in an innovative way with a musical bollard. However, it was removed in 1999.

User behaviour

Competition between groups may happen at facilities where a mix of sports and age groups congregate (e.g. locals mixing with regional participants, boards, blades and bikes at the same venue, different users of shared pathways). Consider strategies to minimise any conflict:

- create a culture of responsibility and a sense of involvement by users in the management of skate issues and facilities



- plan and manage each outdoor venue to accommodate boards, blades and bikes
- introduce (in conjunction with any peak body and skaters) a code of behaviour for use of facilities by skaters in order to minimise conflict developing and reduce the risk of damage to public and private infrastructure.
- consider options for private sector involvement (e.g. skating industry, retail traders, shopping centre managers) in the provision of programs and sponsorship of specific areas or facilities for skating
- seek to provide as much flexibility, changeability and variety in facilities as is practicable.

The City of Brimbank involved interested children and an artist in the painting of pictures on the ramps. Care was taken not to depict just skaters or bikes — in fact they steered away from any specific images that might create factional rivalry. These paintings haven't been defaced, but other graffiti has appeared on the actual skating surface of the ramps. From here on, the council will be using a contractor to remove graffiti on a regular basis.

Extensive involvement of skaters and the community in the skate parks in the Wyong Shire has meant there has been no graffiti.

Graffiti

Graffiti feeds on graffiti. The best way to control graffiti is to involve the community and all potential users in the planning, design, management and surveillance of the facility. A sense of ownership is a good safeguard against both vandalism and graffiti. Consider the following:

- Why not get users to decorate the skate park or paint a mural?
- Don't try to grind or sandblast graffiti off skate surfaces — it may do permanent damage.
- See what the graffiti tells you — and try to address the underlying problem.
- Quickly remove any graffiti.
- Ensure cleaners and safety inspectors are required to check for, and remove, graffiti on the spot.
- Remember today's graffiti invites an answer tomorrow.

How will we involve residents, skaters, others?

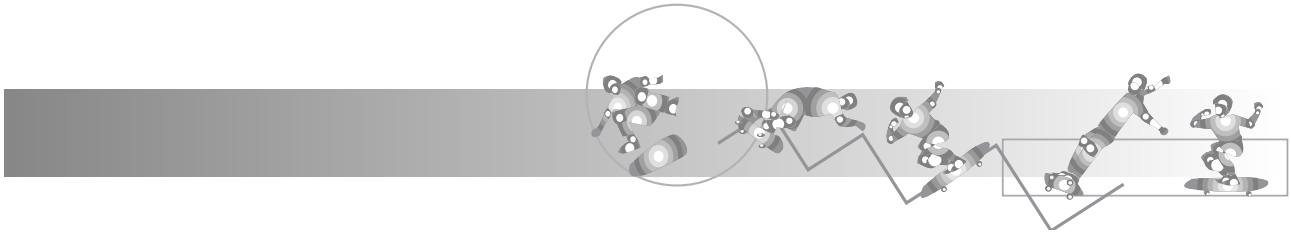
The success of a skate park will be determined largely by the level of involvement and ownership felt by two main groups: skaters and local residents. Ongoing dialogue with skate facility users is necessary to keep track of this diverse, changing community and its needs. A skate park where no one skates is a liability no one wants.

A communication strategy will help. In addition to the common consultation processes of surveys, letter dropping, calling for public input and public meetings, communication processes need to be developed — appropriate to local situations and the resources available — to keep track of issues, particularly as the project moves from the planning phase into design and management. Consider the following:

- encourage and support the formation of a skating organisation, advisory group, club, or committee, but make sure different views are represented (e.g. skateboard and BMX users, residents, traders)
- form links with local networks — skate pros and personalities, local skate shops, schools and the police
- maintain a register of skaters and conduct direct mail-outs as required
- support skaters to start a newsletter or magazine (zines are very much part of the culture)
- develop a website for the park
- post notices to users at the skate park
- advertise to reach the dispersed youth market (and help legitimise the product)
- use public relations techniques to generate news features and reports on skating initiatives, or advice about safety, building your own ramps etc
- use sales promotions to encourage certain market segments (e.g. women to aggressive in-line skating, in-line hockey), and influencing the timing of use to cater for some segments (e.g. BMX freestyle)
- explore indirect dialogue with users through youth outreach, commercial outlets, promoters, and programs
- use schools to educate likely users and alert teachers to the need for skill development and supervision.

"Overall the key element is consultation with users. The angles of curves, banks etc is so critical with the users, if the facility does not meet their needs, skaters will not use the facility and continue using park furniture, shop fronts, kerbing and other streetscapes." Wyong Shire (NSW)

The City of Boroondara undertook an extensive consultation process to plan their new regional facility. This included the formation of a working group to look at the social implications of the project and a design group to look after the technical and skater side. The working group included traders, users, four residents (representing different zones) and neighbouring businesses. All residents within a kilometre were letter-boxed and nominations were called for one resident to represent each of four zones determined by distance from the skate park. Specific selection criteria were used to select the representatives. Similarly, specific criteria were used to select skaters to sit on the design group. These groups communicate with each other and report regularly to the council.



Who will champion the cause?

Every park will need its friends, so start early to develop a key group or a few individuals who can represent users, assist with fundraising and ensure the cause gets good press. The bigger the support network the broader the resource base will be. In the first place, seek support within the local skating community, particularly if there are local skate personalities with credibility ("street cred") and high-level skills. The following key groups and individuals may also champion the cause:

- local police
- local businesses
- youth advocates
- local recreation professionals
- local schools
- local councillors, mayors and MPs
- local service clubs
- local chambers of commerce
- local churches
- community agencies providing youth services
- local shopping centres and trader associations
- local resident action groups.

The success of the Tatura Skate Park can be attributed to the concentrated effort of the Tatura Action Group — a community group spearheaded by key business figures and backed by local residents and pro-youth groups. Their local council, the City of Greater Shepparton, assisted the group to apply for State government funding.

Troubleshooting

Scenario one: "The local kids came to us and we didn't really know much about skating. They helped us with the design and we rang a few places and bought the equipment. We had a slab put in, we fenced it and put in the equipment. But it doesn't seem to be used much."

- A few items were bought off the shelf and put together by people who didn't have the experience

  Provision of just the most basic items of equipment placed on a basket ball court sized slab is not going to set skaters' hearts racing. Even if prefab or precast elements are purchased the park will still need to be designed and equipment carefully laid out.

- Facilities need to provide for a range of proficiencies

  This means providing a range of items able to cater for a range of needs: skaters with differing skill levels, skaters with differing preferences for components and, in the long term, population changes.

Scenario two: "We had a lot of trouble with kids skating in the mall, so we found a site and designed a skate park with the kids. But there are still lots of kids who skate in the shopping areas and not many use the skate facility."

- The skaters involved in the design were relatively inexperienced

  Advice from seasoned or professional skaters is invaluable. It can ensure designs are appropriate and avoid the problem of young skaters mastering the ramp then seeking variety and challenge elsewhere.

- Out of sight, out of mind

  Did initial opposition to putting the facility in a central and prominent place (where the kids wanted to be) lead to an alternative site being selected at a distance from everything in order to allay community concern? If the facility is small, outdoor and not in a prominent, accessible place where young people want to be — they might not bother to come!

- The mall offered more challenges for skaters and was central to where young people liked to gather

  Was the park site less than optimal in terms of centrality for skaters, or not in an activity node, or not easy to get to, or not where young people go already? Were the chosen skate park obstacles too predictable? Were the challenges of the street not replicated in the built facility?

Scenario three: "It was all going along smoothly ... we had a concept done by the local kids and we raised all this money. It was hard finding a site and finally when one was agreed on we found we had to apply for a planning permit to build the skate park, and a couple of local residents objected to it on the grounds of noise and graffiti that might follow. It held up the process for months."

- It took a long time to get the skate park happening and it was very complicated

  The process of determining site suitability should include a review of ownership, development requirements and approval processes. Gaining development approval is not an insurmountable obstacle, but it may require sourcing expert planning advice. Because some statutory planning processes and approvals need to be advertised for a defined period it may cause delays that are longer than the project can wait.

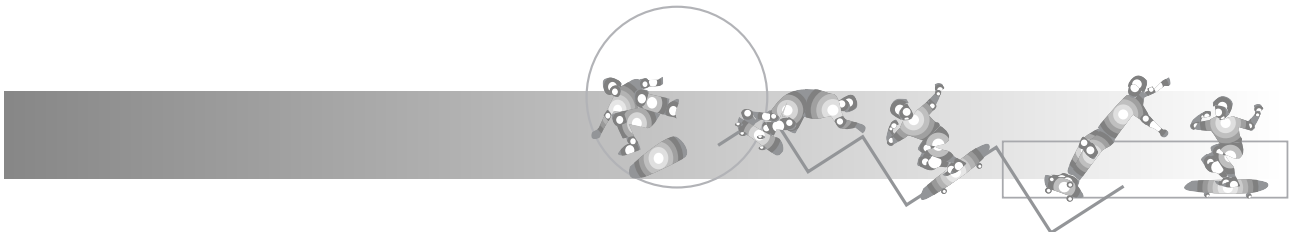
- Opponents to the skate park are disgruntled

  It is important to get the community and adjacent residents on side quickly to deal with any likely issues that may give rise to objections. An exercise of changing public perceptions to skating and youth activities may be also required. Concerns can be responded to with facts, well presented arguments, and case study information from other skate parks. People may not only withdraw their objections but become active park supporters, if their misunderstandings and misapprehensions are addressed early.

Scenario Four: "We only have a small population and not much money. We spent a lot of time and money building a ramp designed with the kids, and a few months later the group of skaters involved in building the thing had moved on. The bikes then moved in and now they've also moved on. Now it's not used much and no wants to take any ownership of it and ..."

- The budget or the land available meant only a ramp could be built

  An area with one ramp is unlikely to meet the needs of many skaters. A greater number of smaller parks may be better than one single facility. If the budget only allows one ramp to be provided now, stage the project and co-opt a sponsor agency (e.g. youth group, or service club) to help raise money for more



equipment, and involve well connected parents to push things along. This could make the difference between success and failure for skate facilities in smaller localities.

- If the surface is poor, skaters are likely to move out and BMXers move in

  By tapping into the experience of skaters through the design stage, specifications (especially for surfaces) can be checked and drawings perused before construction. Practitioners may also help with the selection of construction contractors and even supervise construction. The quality of surface finish is one of the most critical aspects of a park for skaters.

Skate park planning checklist

POPULATION TRENDS

- ☐ Population trends established, especially for the 10–19 age group, for each suburb in the municipality.
- ☐ The number of people likely to board, blade or BMX, estimated by area, and therefore in what areas skate participation is likely to be sustainable.

LOCAL ISSUES

- ☐ Local skate personalities — boards, blades and BMX — and from professional to beginner involved (to determine trends, key issues, attitudes and preferences likely to impact on facility provision, and to participate in the planning, provision and management of facilities, as well as the sport's development).

SKATING PROVISION

- ☐ Figures on skate participation and provision have been compared to other local sport and recreation activities.

ENCOURAGING SKATING

- ☐ Strategies identified to improve skating opportunities (e.g. programs, events, clinics).
- ☐ Street safety improved (e.g. wide paths, skate symbols on paths, skate lanes, regular cleaning).
- ☐ Skaters' needs are taken into account in broader planning and design decisions.

FACILITY OBJECTIVES AND STRATEGY

- ☐ Key target users identified.
- ☐ Objectives of providing a facility documented (i.e. who, what, when, how, and is a facility going to solve the problem?).
- ☐ Roles determined (i.e. are you a provider or facilitator or both, do you commonly get involved in program and service delivery and management of facilities?).
- ☐ A strategic position in relation to long-term skate facility provision agreed.

TYPE AND NUMBER OF FACILITIES

- ☐ Decision taken on number and type of facilities to be provided in the long term.
- ☐ Mix of facilities (indoor, outdoor, permanent, temporary, skateboard, blades, BMX) considered and decided.
- ☐ Issues for each of the user groups (i.e. board, blades and BMX) considered.

Managing the development process

- ☐ Decision on supervised or non-supervised facility taken and nature and extent of supervision documented.
- ☐ Opportunities to combine management contracts assessed.
- ☐ Opportunities for skater, resident and other input assessed.
- ☐ Distribution, location and siting
- ☐ A hierarchy of facilities determined (e.g. regional, district or local).
- ☐ Localities where there is likely to be the greatest sustained demand identified.

Distribution, location and siting

- ☐ Budgeting
- ☐ Communication
- ☐ The distribution of skate opportunities agreed.
- ☐ Criteria for location and siting agreed.
- ☐ Opportunities for co-location and partnerships identified.
- ☐ Ownership, zoning, registration, policies and plans for the preferred site checked.
- ☐ Planning approval, referrals and consultation processes followed.
- ☐ Realistic time line developed.
- ☐ Central node sites identified (i.e. where young people currently gather or currently pass).

Pricing and cost planning

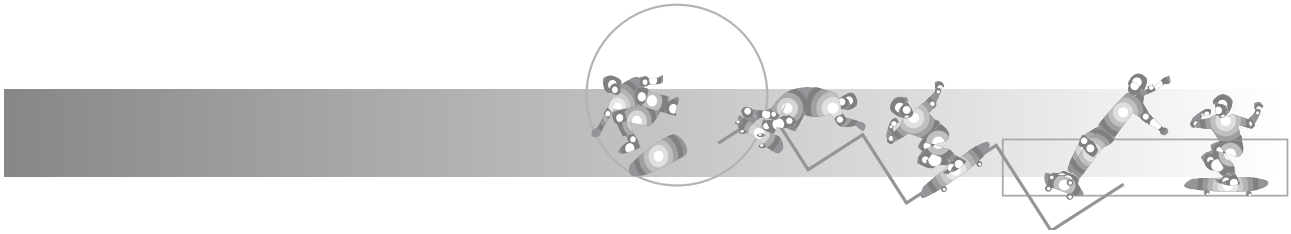
- ☐ Cost plan devised.
- ☐ Budget issues (how much can you afford?) resolved.
- ☐ Staging and opportunities to raise funds and income reviewed.
- ☐ Decision whether or not to charge entry fees finalised.
- ☐ Costs allocated for facility's entire product lifecycle (e.g. planning, design, construction, management, maintenance, evaluation, upgrade and retrofit).
- ☐ Marketing, cleaning, programming, consultation and communication budgeted for.

Communication

- ☐ Communication strategy developed including provision to communicate with the general public, skaters, key stakeholders (from inception of project to end of its useful life).

design development

- ☐ Sufficient land area reserved to accommodate the range of users, diversity of elements, future growth, associated amenities, signage and car parking etc.
- ☐ Key stakeholders, including experienced boarders and bladers, BMXers involved in design development.
- ☐ Creativity encouraged rather than standard elements.
- ☐ Core elements determined (e.g. mini or vert ramp, street style obstacles, bowl, or a combination of these).
- ☐ Landscaping elements and amenities included in design (e.g. shade, paths, edge treatments, toilets, drinking water).



- ☐ Needs of different skill levels addressed.
- ☐ Opportunities to integrate existing ramps reviewed.
- ☐ Critical specifications for equipment, surfaces and transitions checked.
- ☐ Risk management plan prepared.

MATERIALS

- ☐ Critical specifications for equipment, surface finishes and materials checked.
- ☐ Decision on use of pre-cast, prefabricated components or construction in situ.
- ☐ Suitable materials chosen — to meet budget, local conditions, design and construction requirements.

LAYOUT

- ☐ Siting, layout issues in the broader park area agreed.
- ☐ Distances to fences and structures reviewed. Fall zones considered.
- ☐ Adjacent materials considered (i.e. no loose materials).
- ☐ Distance between items enhances flow and minimises conflict.
- ☐ Areas designated for different skill levels.
- ☐ Shade and lighting suitability reviewed.
- ☐ Noise considered (distances, materials, enclosure, rigidly, acoustic treatments).

SIGNAGE

- ☐ Warnings, information, rules, etc reviewed.
- ☐ Design, materials, construction and position agreed.
- ☐ Signs installed before park is opened.

CONSTRUCTION

- ☐ Experienced skaters on selection panel.
- ☐ Contractor with experience in skate parks and good reputation chosen.
- ☐ Adequate supervision of works.
- ☐ Risk management (construction) signed off.

MANAGING THE PARK

- ☐ Education programs, clinics, demonstrations organised before opening.
- ☐ Management and development plan prepared.
- ☐ Opportunities for ongoing skater and community input.
- ☐ Responsibility for conduct of programs and events considered and agreed.
- ☐ Communication program about the park introduced.
- ☐ Risk management plan implemented.

PROCEDURES

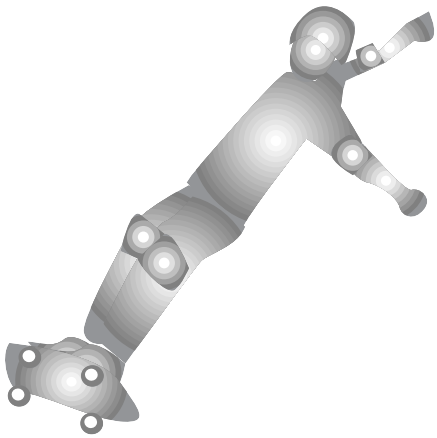
- ☐ Procedures, including risk identification, evaluation, control and rectification introduced.
- ☐ Regular cleaning and maintenance program introduced.

- ☐ Codes of conduct introduced with skaters.
- ☐ Strategies to enforce codes of conduct agreed.

PARK DEVELOPMENT

- ☐ Means of measuring usage established.
- ☐ Ongoing program of evaluation and development planned.

6. Design



Before you get to the design … the next key questions are:

- How big?
- How much money is there to spend?
- Will you cater for boards, bikes and blades?
- What do skaters want?
- What level of skill will be catered for?
- What components should be included?
- What materials should be used?
- How do we put it all together?
- What other design and safety considerations are there?

Skateboarding, in-line skating and BMX are all sports that foster creativity. New challenges and new skills are evolving constantly, so last year's 'cool' ideas may not be relevant today. The task for designers is to build in flexibility so a skate park can change and grow. This can be achieved by keeping an open mind when choosing and designing components, and most importantly by ensuring seasoned skaters are involved in design.

How big?

An average size for a small street skate park is around 3,000m^2. Limiting the size of a skate facility will limit diversity and flexibility and impact on viability. Small sites may also affect safety if flow patterns are compromised and the capacity to separate beginners from more skilled skaters is limited. Unless a skating surface is at least 30m x 40m it is difficult to provide enough diversity to sustain the interest of beginners, intermediate and extreme skaters. A mini ramp alone needs an area about the size of a basketball court.

Undersized skate parks tend to get put on undersized sites. This exacerbates any problems caused by proximity to residences, fences, incompatible land uses and areas with incompatible surfaces (e.g. sand), and limits opportunities for landscaping and support facilities. Many skate parks built in the late nineties will be too small to continue to meet the needs of skaters in years to come.

How much money is there to spend?

The budget will determine many things, including size, materials and type of components. Where budgetary constraint is not an issue, consider using more design assistance and incorporating high class finishes. Alternatively, opt for indoor and supervised facilities and a good mix of in-ground facilities with street ramps for flexibility — over and above increasing size. If you only have a small budget, here are some tips.

- First, allocate funds for design advice from a professional skater or a designer who has experience and credibility within the industry (even if it means less equipment at the park initially).
- Stage the development (more support may be attracted to the development once it has begun).
- Build a relatively inexpensive street style area first before adding in situ components.

- Look at prefabricated and off-the-shelf items (but ensure quality to minimise design and construction difficulties).

In other words, don't compromise on the design because of cost. The park needs to be a reasonable size to cater for different skill levels and cope with later expansion. Be sure you offer riders diversity and challenge — otherwise they won't keep coming back!

Will you cater for boards, bikes and blades?

Skate parks need to respond to the local demand and if possible, changing demand. They are not like football and cricket grounds, uniform in design. Nor is it a matter of copying someone else's design and assuming it will work.

Not all skateboarders (and bladers) are the same. Not all communities have the same mix of riders: local demographic patterns, whether facilities have been available and for how long, patterns of use (or dominance) by particular groups, and even personalities, can shape the history of the sport in any area. For instance, in some communities there may be more bikes or aggressive in-line skaters than boarders, while in others, "BMX rules".

If a skate facility is designed for just skateboarders (or any other one dominant style) it will be less likely to respond to changes in the future. A range of specific features suitable for a range of particular styles may be preferable.

Think carefully (and make a conscious decision about) whether it is necessary to restrict use of the facility to, for instance, just skateboarders. In fact, there usually isn't a reason: most users can work it out between themselves without major conflict. Even if pressure builds up at particular times because of numbers, it is possible to allocate times for specific activities.

If bikes, blades and boards are all to be accommodated, ensure that they are specifically catered for, and that people who specialise in each sport have been consulted.

BMX freestylers in the City of Casey said they were often chased from public facilities by skaters who said "look at the sign — this facility is only for skaters".

What's in a name

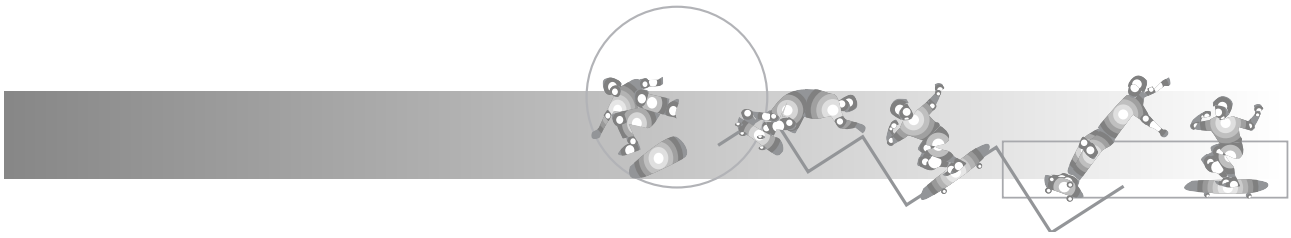
The name and signage on the facility should welcome all styles. By calling facilities skate parks, a message of exclusion is sent. Instead, try The Awesome Skate and Bike Park, or signs that say "This park is for bikes, blades and boards".

What do in-liners and BMX freestylers want?

Most skate parks cater primarily for skateboarders. Here are a few tips about what in-liners and BMX freestylers want in a skate park.

BMX freestylers

- Access time to facilities — the biggest issue for bikes. Many facilities exclude them or only make a few specified time slots available.
- Bigger facilities with more space — because bikes take more space to manoeuvre. Distance between jumps should be a little more than for skaters — i.e. more than 6m — but not too far because lots of flat



land is boring to ride. Obstacles generally need to be bigger and wider (3,600mm per section) than for boards.

- Coping and steel edges-bikes like components with coping and right angle steel edges. Pedals and pegs may chip concrete edges.
- Dirt jumping — it's as popular as street riding. Consider the provision of an area with dirt jumps near to the street area. Take care to prevent loose dirt from dirt jump area spreading on to the street area.
- Greater depth — a key issue in ramp design for bikes is a greater depth on platforms — at least 2.4m. (These dimensions have been taken into account for all recommendations in this guide.)
- Heights — grind boxes and rails need to be higher than pedals and pegs so riders don't get hung up (at least 300mm off the ground).
- Rhythm — bikes like to jump more than one box in a row, and, where possible, two or more of different heights.
- Transitions — these need to accommodate the wheel base of a bike and therefore can't be as tight as for boards.

In the City of Casey the demand for outdoor ramps at Merinda Park was primarily from BMX freestylers. The upgrade of one ramp therefore had to meet their needs.

In-line skaters

- More coping on edges — in-liners prefer coping instead of square bar for grinding.
- Equipment and facilities with curves — for example, a curved ledge (see components section).
- Obstacles with varying heights.

What level of skill will be catered for?

Not all components are suitable for skaters of all levels. Commonly, skill levels are classified into beginner, intermediate and extreme (advanced). There are a number of different ways to deal with variations in skill level.

Choosing components

When choosing equipment, keep in mind the different skill levels of users. (In the next section an indication of the suitability of equipment for each skill level is given, where possible.)

Separate areas

Set up different areas for skaters with different levels of ability. Segregation means less embarrassment, fewer injuries, and greater satisfaction.

Identifying different skill areas

Consider colour coding equipment, areas and runs to identify degree of difficulty, perhaps the same as used in snow skiing — green, blue and black.

The City of Greater Geelong introduced a colour coding system at the Waurn Ponds Skate Park to identify zones suitable for riders with different levels of skill. Each separate zone has been identified by painting a line in the appropriate colour around the area. The system is based on a colour coding system used for snow sports: black means advanced, blue is intermediate, and green is for beginners. Signs also display the map of each zone and explain the colour coding system.

What components should be included?

The equipment used by skateboarders, BMX and aggressive in-line skaters are includes ramps, grind poles, manual pads, pyramids, fun boxes, wedges, curved ledges, bowls, capsules. Each of these components is described in the sections that follow.

Ramps

The main types used by skateboarders, BMX and aggressive in-line skaters are:

- Vertical ramp
- Mini ramp
- Composite ramp
- Street-style ramps

Vertical ("vert") ramps

A vertical ramp consists of two opposing symmetrical concave planes joined by a flat area between. Each concave riding surface extends into a vertical plane on both sides of the ramp. This type of structure is commonly called a vertical half pipe (**Figure 1**). A vertical ramp caters primarily for advanced skateboarders. Users tend to be in the older age groups, i.e. 17-plus.

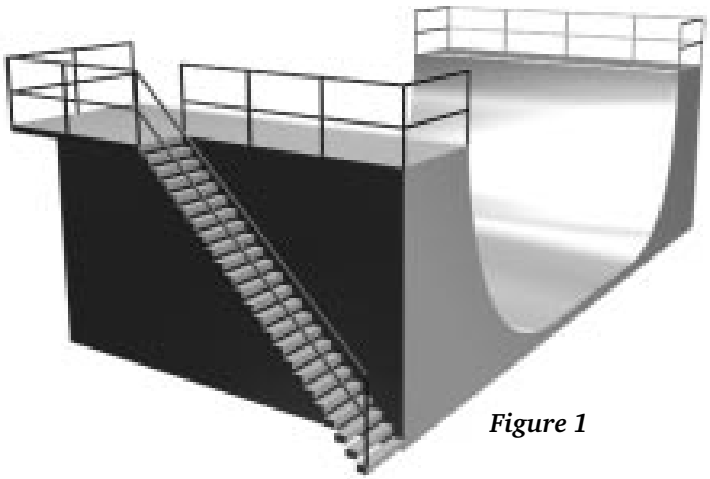


Figure 1

The major design consideration is the radius of the transition. This is the concave section of each side of a ramp providing the transition from horizontal to vertical skating surface. The transition is commonly an arc of a circle, making the radius a critical performance dimension (**Figure 2**). The greater the radius, the easier it is to ride. There is no maximum because it all depends on the ramp, its users and its intended purpose. The bigger the radius the more vertical

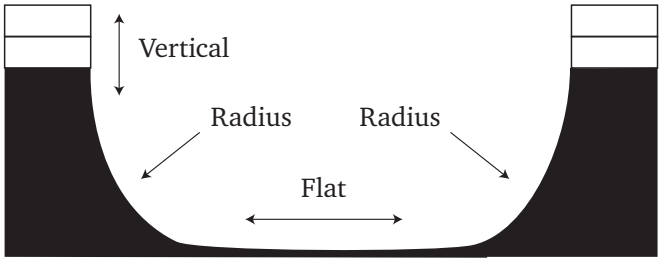
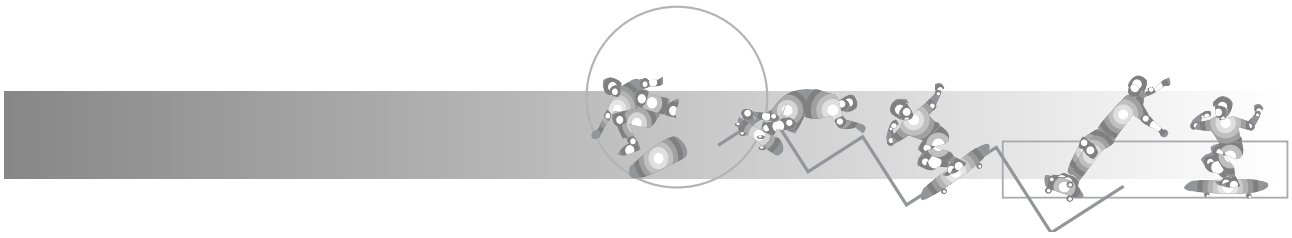


Figure 2



required. A bigger radius allows more speed and time in the air. If the curve is too tight (less than 2,700mm radius) the ramp will be difficult to ride.

The amount of useful vertical is determined by the wheel base of the skateboard, hence an effective vertical should be a minimum 250mm in height (**Figure 3**). If the amount of vertical corresponds to the wheel base of the skateboard, the skater's line of movement is vertical when leaving the ramp for aerial manoeuvres.

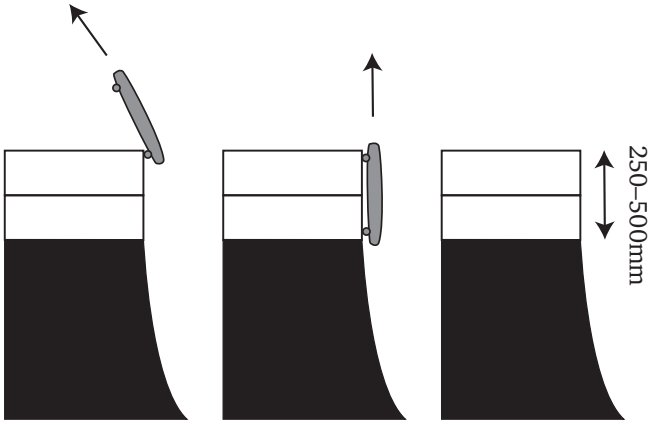


Figure 3

Critical dimensions

Transition radius 2,700mm (minimum)

Optimum 3,000mm

Vertical 250mm–700mm

Optimum 500mm

The height of the ramp is determined by the radius and the amount of vertical. But reducing the height of a ramp by reducing the radius will not create a better ramp (see radius). Therefore the height alone should not be used as the dimension that dictates performance characteristics.

The flat

The flat section between the two concave transitions must be long enough to give riders time to react and re-position as they come off the curve. If the flat is too long, the rider will lose the necessary momentum needed to ride up the ramp on the opposite side.

Adequate width is needed to allow for manoeuvres that involve diagonal movement across the ramp. Less skilled riders tend to need a wider area as they have less control over the board. There is no limit to the maximum width of a ramp in respect to performance, except cost and site constraints.

For ramps less than 12,000mm wide, it is recommended that no roll-in areas, or channels, be incorporated as these reduce side-to-side mobility.

Critical dimensions

Length of flat 4,800mm–5,500mm

Width 8,000mm (minimum)

Optimum 15,000mm

Coping

An overhanging edge, or coping, should run along the full width (both sides) of a ramp. This section of the ramp is a highly stressed area, therefore it must be absolutely rigid and bolted or welded securely to the framework. The most commonly used material is galvanised steel pipe (**Figures 4** and **5**).

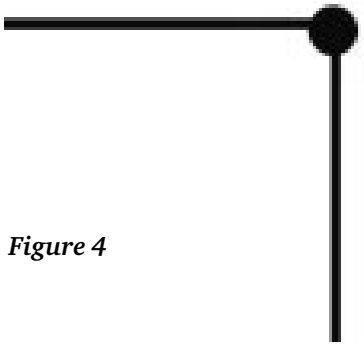


Figure 4

Coping acts as a launch for off-the-lip manoeuvres and as a reference point for riders warning them that they are approaching the top of the ramp. Coping lifts and kicks the wheels of the board back onto the ramp as the skater performs a turn (or trick or manoeuvre). If the coping protrudes too far out over the edge of the ramp, the rider may hang up on this curved area, and take-off for airborne manoeuvres can be too abrupt. For this reason it is essential that coping does not protrude more than 10mm–12mm over the edge of the ramp. These dimensions are determined by the distance between the bottom of the skateboard wheel and the wheel axle. If the coping is more than 5mm–10mm above the platform it will make it difficult to maintain balance for the majority of tricks and will increase the risk of getting snagged when doing manoeuvres.

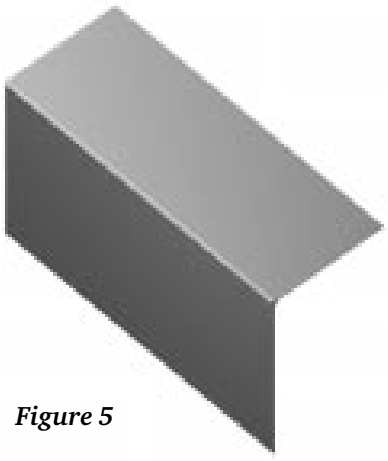


Figure 5

Critical dimensions

Diameter of pipe	60mm
Overhang	10mm–12mm
Height above platform	8mm–15mm
Wall thickness	4mm–6mm

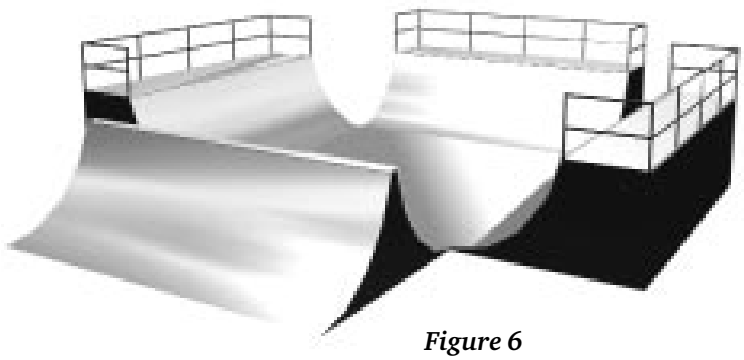


Figure 6

Retro-fitting vert ramps

In the 1980s many vert ramps were placed in parks across the state and many remain — often in poor locations, in poor condition and unused. The lack of other facilities — water, toilets, landscaping, shade etc — did nothing to encourage use. Some vert ramps have since been cut down to mini ramps in an attempt to increase usage. Some have been relocated (often in association with other facilities), refurbished or modified, had noise dampening added and are quite well used, especially by older skaters.

If the facility is in good condition don't discard it, integrate it into other areas used by skaters and BMXers. Once these ramps are modified to minimise noise and to allow easy access to other skating equipment in the park, they can take on a new lease of life. The following plan (**Figure 6**) shows how the Benalla ramp was modified and integrated into a new park.

Some examples of vert ramps being retrofitted and still in use include Mossfiel in the City of Wyndham, the St Albans ramp in the City Brimbank, Benalla and in Belconnen, ACT.

Channels

A channel is often provided to facilitate entry onto a vertical half pipe ramp, particularly for skaters with less advanced skills (**Figure 7**). To allow sufficient rideable surface, the ramp should be at least 9,000mm–12,000mm wide when a channel is incorporated. The sides of a channel must be enclosed. A minimum of 3,000mm is required on either side of the channel.

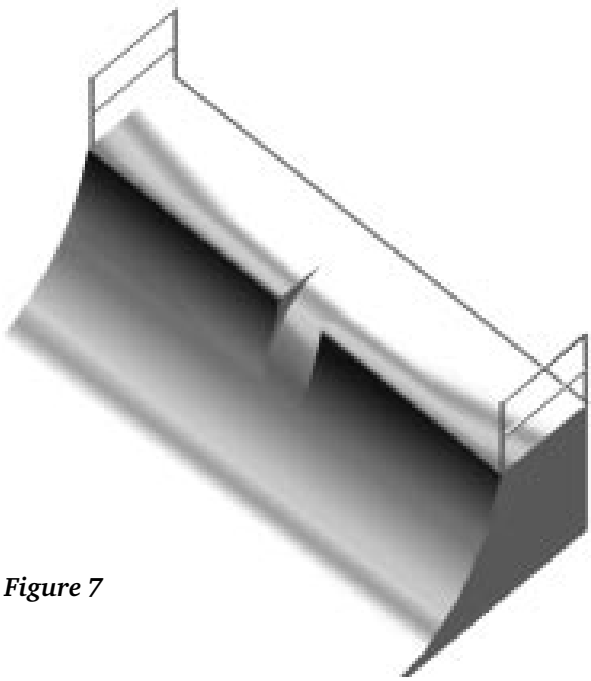


Figure 7

Critical dimensions

Width of channel 760mm–1,000mm

The quarter pipe

A quarter pipe ramp is one half of a half pipe ramp. Quarter pipes have a curved (or transition) surface. Edges of the riding surface touching the ground must run flush with the slab surface. A handrail is required. The height of the ramp is determined by the radius and the amount of vertical (if required). A quarter pipe ramp may be located at the lower end of a long flat and included to provide run up. It can be designed to cater for beginner, intermediate (if constructed without any vertical) and advanced riders (**Figure 8**).

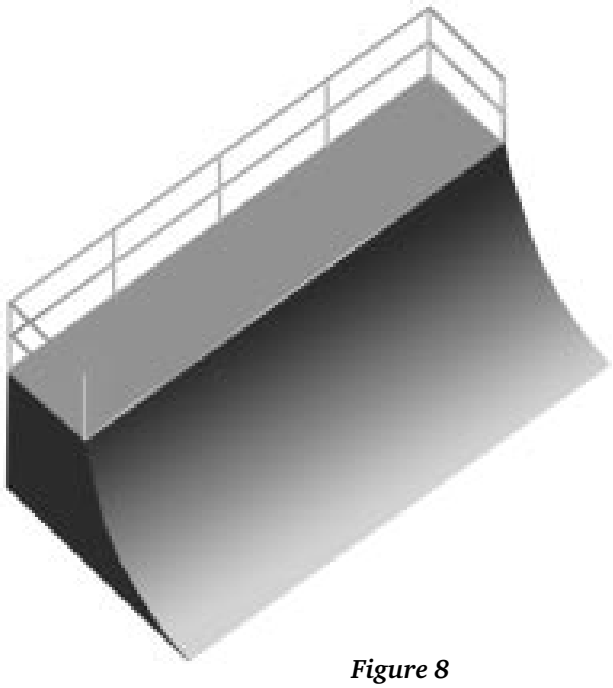


Figure 8

Use

This obstacle teaches riders to drop in from varying heights, thus gaining access and speed to tackle the rest of the skate park. It allows them to do tricks, kick turn, or link a technical line incorporating a trick from the quarter pipe before tackling the fun box and the remainder of the park. Most riders will start from the quarter pipe or a wedge.

Placement

Usually at one end of the facility.

Critical dimensions

Height 1,200mm–2,400mm

Width 2,400mm (each section)

Radius 1,800mm–3,000mm

Platform 1,200mm–2,400mm

Mini ramps

A mini ramp differs from a vertical ramp in that it has no vertical section at the top of each transition, and the concave section of the ramp (or transition) is less than a quarter-arc of a circle (**Figures 9** and **10**).

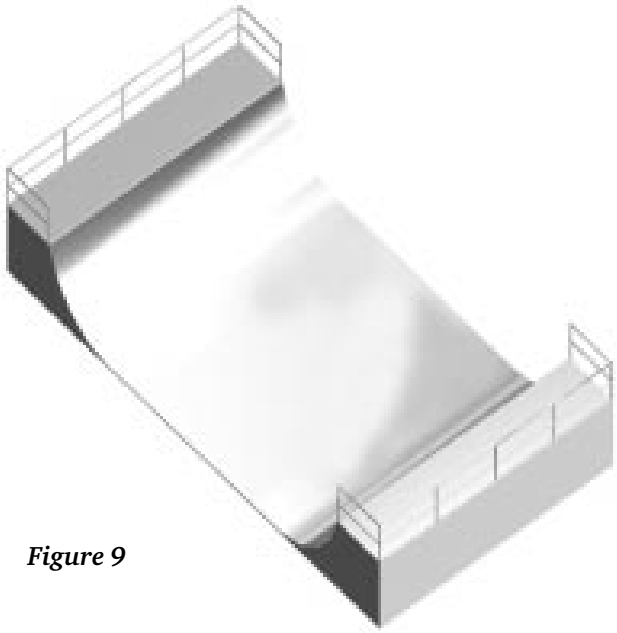


Figure 9

Use

Mini ramps cater effectively for the beginner and intermediate rider as well as the skilled rider. They are less intimidating than vertical ramps for the novice skater, and the entry on the ramp is easier. The majority of manoeuvres on a mini ramp are performed on the lip (coping).

Mini ramp skaters gain neither the height (from aerial manoeuvres) nor the speed of vertical ramp skaters, so the recovery time required for skaters to reposition (as they move from one transition to the other) is less. Therefore the flat can be shorter than for vertical ramps.

The height of a mini ramp is determined by the radius and the angle at which the arc is truncated. The radius of mini ramps can be less than for vertical ramps. Coping requirements are the same as for vertical ramps.

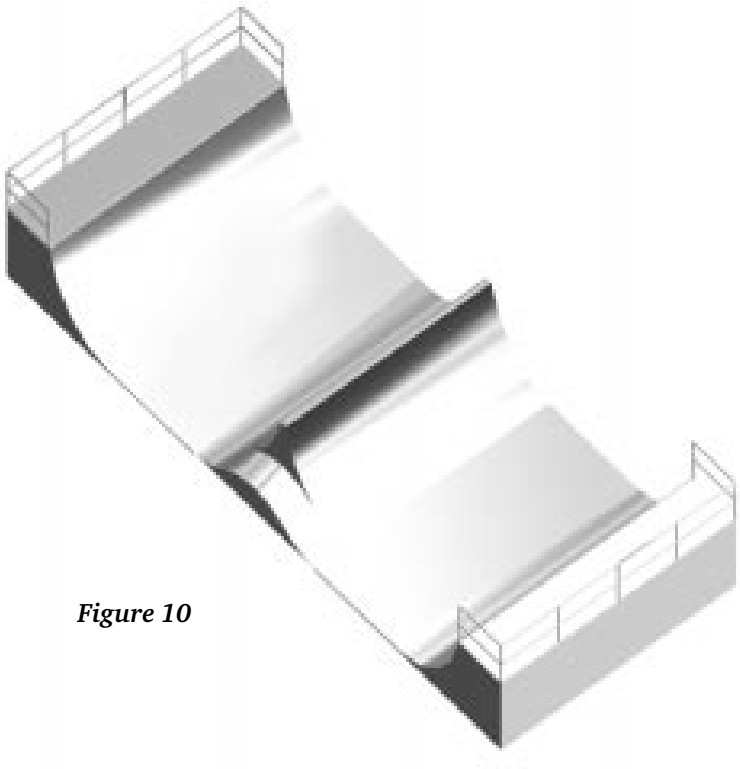
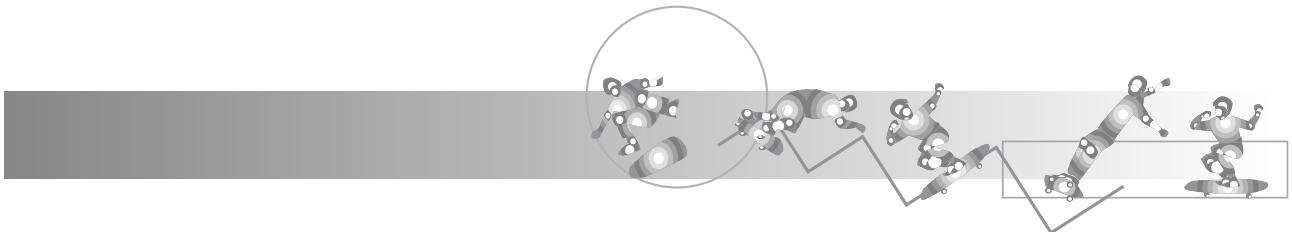


Figure 10



Critical dimensions

Transition radius	2,250mm–2,700mm
Optimum	2,500mm
Length of flat	4,000mm–5,000mm
Optimum	4,500mm
Width of ramp	5,000mm (minimum)
Optimum	8,000mm
Height	1,200mm–2,100mm
Optimum	1,800mm

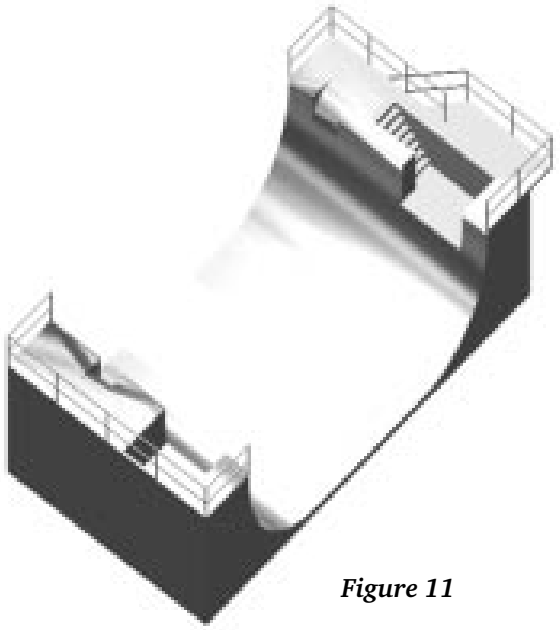


Figure 11

Composite ramp

Composite ramps are an amalgamation of vertical and mini ramps, with a number of optional design variations. They are generally wider than conventional ramps.

The dimensions of this type of facility will depend on the number of different features incorporated. For example, a composite ramp may incorporate two vertical sections (also called elevations, escalators or extensions), a mini section and a channel (**Figures 11**, **12** and **13**).

Variations on this may include one or two extensions located on either side of a mini height ramp, cut off before they reach vertical. These combinations may be used on ramps that run at right angles to each other, sharing a common platform.

Another variation, a spine ramp (**Figure 14**), is a trick ramp with a spine in the centre consisting of two ramps positioned back to back. The spine is formed by two pieces of pipe coping that run along the width of the ramp. The curves and ramp can be different on each side, but it is recommended that curves on either side of the spine should be the same. A roll-over may be incorporated for riders who do not want to use the spine.

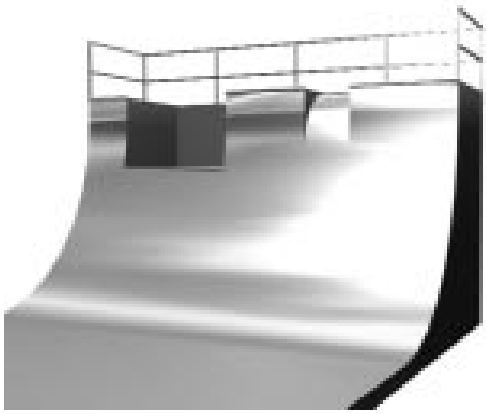


Figure 12

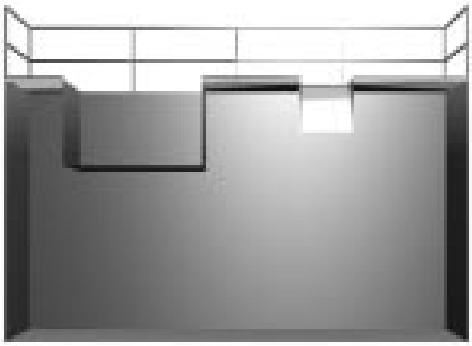


Figure 13

Street ramps

Obstacles or small ramps are used to replicate the challenge of street-style skating, but in a safer environment. They can be transportable and relatively inexpensive. They also allow for greater flexibility of

use and configuration, and cater for a broad range of users, especially novices. Obstacle ramps are generally laid out on a flat concrete slab — disused hard court tennis courts are popular, but not the best, sites. However, portability, an advantage of these ramps, also poses some problems. When made off-site and transported to a slab base with irregularities, or if gaps are left between the nose of the ramp and the slab, hazards are created for riders.

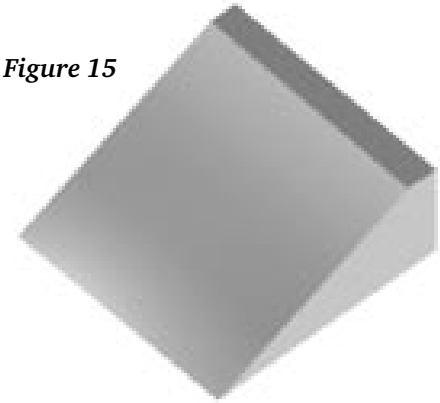
Note: Freestyle or street bowls can still be found. These were seen in skate parks in the 1970s. They are still relevant, and should be made big enough to place street obstacles in the centre.

Figure 14

Spine ramp

This consists of two quarter pipe ramps positioned back to back, with two pieces of coping forming the spine of the ramp (**Figure 14**).

Figure 15



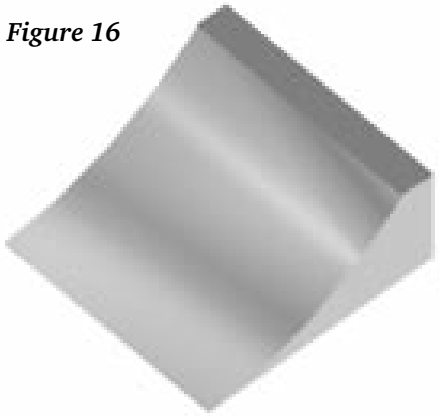
Use

The rider comes up one side of the ramp and exits over the other side — sometimes performing tricks on and along the spine.

Launch ramp

A launch ramp is a small version of a quarter pipe. The transition can be substituted for a flat bank (**Figures 15** and **16**). It has no coping and requires a smaller platform (perhaps 200mm–400mm).

Figure 16



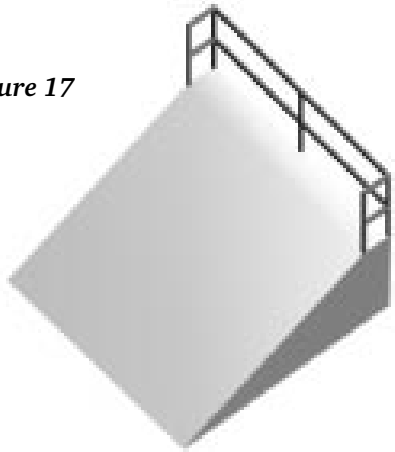
Use

Used by riders to practise jumps, and by beginners to learn basic moves.

Wedge ramp

This is a wedge-shaped obstacle, otherwise called a flat bank, with no coping (**Figure 17**).

Figure 17



Use

Used for off the lip manoeuvres or as a launch onto another obstacle such as a boardslide.

Grind pole

A grind pole is a metal pole constructed from square bar, with single or double coping (**Figure 18**).

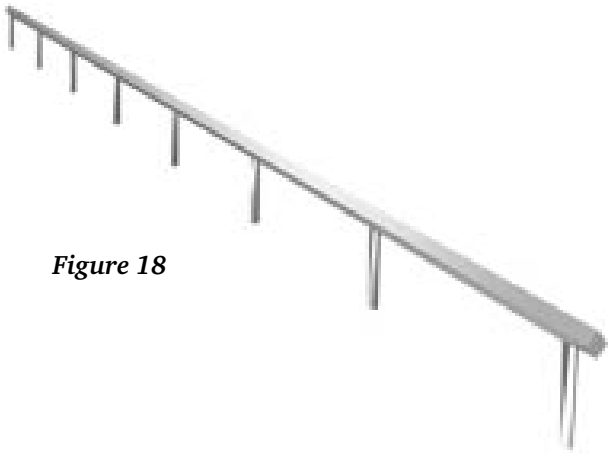


Figure 18

Use

This component is constructed at varying heights for different skill levels. Riders approach the obstacle, then jump (or ollie) onto the top side, and perform a "grind". This entails smoothly sliding the truck of a skateboard, the grind plates on the base of in-line skate, or the pegs on BMX bikes for the length of a section of the pole before dropping off the end and moving onto the next component.

Placement

When placing grind poles into a skate park, choose a variety of square, double and single coping grind poles, and handrails (**Figure 19**). This helps riders become proficient and prepares them for conditions in the street environment. They are generally to be placed on the outskirts of the slab and along the line of flow. **Note:** Double coping suits in-line and BMX usage. A square bar, generally 3mm wall thickness, suits skateboard use, BMXers and in-liners. (The square bar takes more practice.)

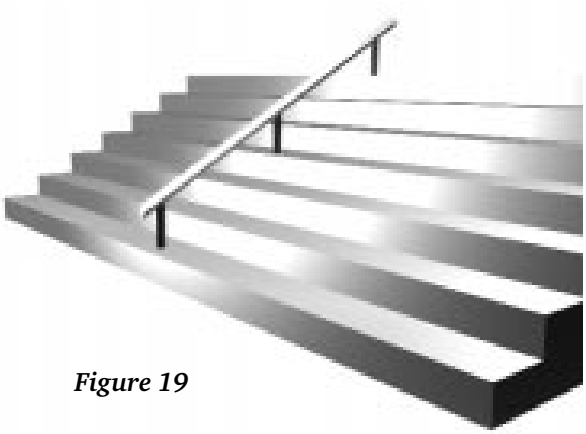


Figure 19

Material

Double coping of 60mm with a 3mm wall thickness, with two sections of coping welded together.

Critical dimensions

Coping	60mm diameter (wall thickness 4mm–6mm) **[32]**
Height	100mm–400mm (in-line and BMX 300mm–500mm)
Length	5,000mm (optimum)
Square bar	100mm x 100mm (wall thickness 3mm–5mm)

Figure 20

Manual pad

The manual pad is commonly built of concrete with a 50mm x 50mm metal edge fixed or fastened to the top edge of the pad, or every edge that riders can grind, which, in some cases, may be every side (**Figures 20** and **21**). This ensures a smooth, consistent grind and protects the concrete, thus reducing ongoing

maintenance. Coping can be installed in place of metal edges (see **Figures 4** and **5** for coping detail).

Figure 21

Use

This obstacle can be approached from either end, and as with the grind pole, the rider jumps (ollies) onto the top or grinds the edge of the manual pad.

Placement

As a general rule manual pads should be placed around the outskirts of the skate park, not used as a main feature. **Note:** Manual pads are great fun, but choose a height that suits skaters' level of ability — too high and it will be left unused.

Critical dimensions

Height	100mm–300mm (in-line and BMX 300mm–400mm)
Length	4,000mm–5,000mm
Metal edge	50mm x 50mm

Figure 22

Pyramid

Along with the fun box, this obstacle is usually the main feature of any skate facility. A grinding ledge may be placed on the side of a three-sided pyramid to add variety (**Figure 22**).

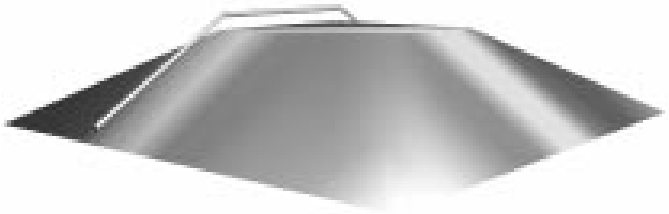


Figure 23

Use

They provide a lot of fun and challenge for the rider, used as either a hip style ramp or as a launch ramp and allowing the skater to jump the platform on the top.

Placement

Since this is usually a main feature in a skate-park, the pyramid is generally placed in the centre (depending on the width of the park). When the slab is narrow, the three-sided pyramid (**Figure 23** — with or without ledge) is selected. Users can still have a pyramid on a narrow site if care is taken to place it in the most functional position.

Material

Generally concrete or steel, this ramp does not require coping or metal edges since there are no grinding surfaces (unless a grind ledge is included) on the basic pyramid. Consider using a 4mm — 6mm sheet of steel on the flat top as this section takes lots of heavy landings. **Note:** Pyramids usually have flat banks as opposed to transition take off and landing ramps. The critical dimension is the angle of the take off and landing ramps (between 15˚–30˚).

Critical dimensions

Platform	2,000mm–4,000mm
Height	500mm–1,200mm
Length	1,500mm–3,000mm
Angle	15˚–30˚

Hip ramp

This ramp can have flat banks or transitions (**Figures 24** and **25**). Where transitions are used, coping must be incorporated.

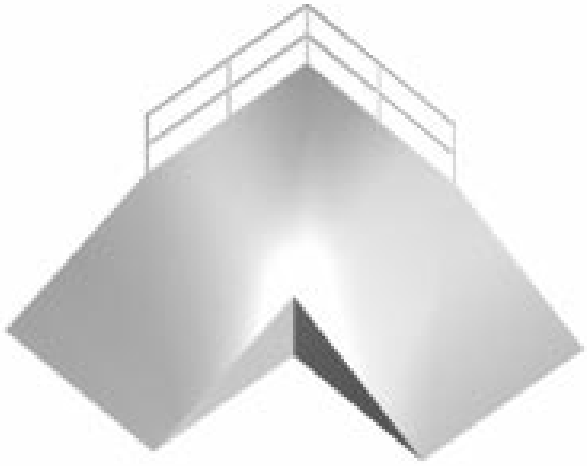


Figure 24

Use

This ramp allows the rider to change direction while travelling over the obstacle. Along with the quarter pipe and wedge, it is also a starting point within a skate-park.

Placement

Optimum position for a hip ramp is in the corner of a skate-park.

Material

This obstacle is best constructed from concrete or steel. Coping must be incorporated when transitions are used instead of flat banks. **Note:** The edges of the riding surface touching the ground must run flush with the slab surface. A handrail is required.

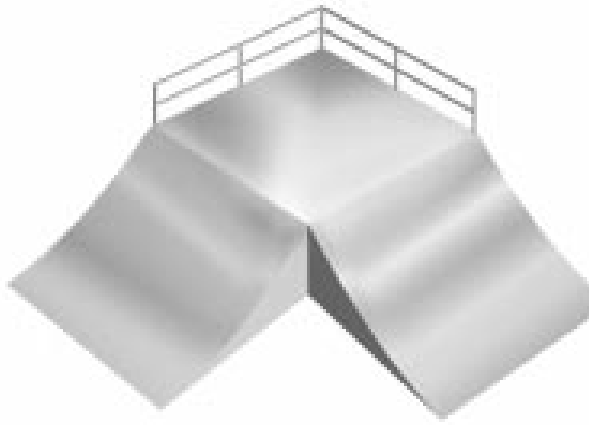


Figure 25

Critical dimensions

Height	1,200mm–2,100mm
Width	2,400mm–3,600mm
Radius	1,800mm–3,000mm
Gradient	15˚–30˚
Platform	1,200mm–2,400mm

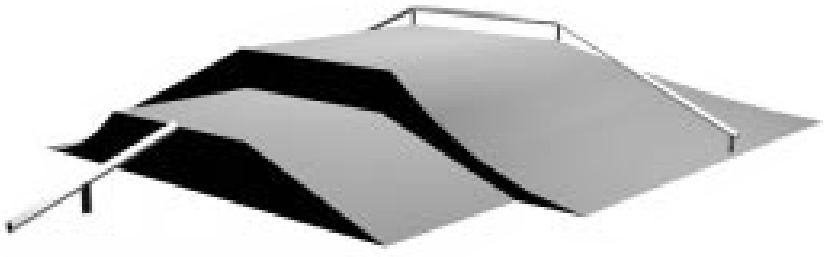


Figure 26

Fun box

Well named, the fun box can be great fun. It can be complex or simple, depending on budget. Riders can attack all sections of the fun box — the manual and ledge, do a transfer, and jump the platform (**Figure 26**). Access (to and from) is as important as the fun box itself. Riders need to get speed from an obstacle

on their approach, then find somewhere to take their speed after completing a manoeuvre over the fun box — perhaps from a wedge ramp to the fun box to a quarter pipe.

Use

If the designer is encouraged to use imagination and creativity, this section of the park can be made the most challenging, fun and exciting.

Placement

This obstacle needs to be placed in the centre of the facility. However, depending on the width, a three-sided fun box may be placed to one side of the area.

Material

Usually metal or concrete. The structure does not require coping or metal edges unless incorporating grinding ledges or handrails. A 4mm–6mm steel sheet is recommended on the flat top to withstand heavy landings. **Note:** A combination of flat and transition take-off and landing ramps should be incorporated. Where edges of the riding surface touch the ground they must run flush with the slab surface.

Critical dimensions

Height	500mm–1,200mm
Width	Depends on complexity
Radius (curves)	1,200mm–2,100mm
Gradient (flat ramps)	15˚-30˚
Platform length	1,200mm–2,700mm

Wedge

Also termed a flat bank, it originated from placing a door against a solid wall and riding it. Basically a steeper and higher version of a disabled ramp, constructed for skating and with a platform (**Figure 27**).

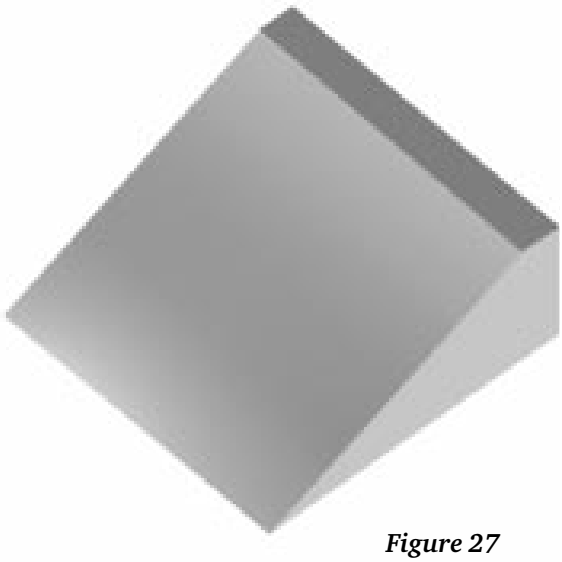


Figure 27

Use

The wedge is generally used as a start ramp and is often referred to as such. Alternatively, a trick is performed on the ramp face before the rider continues on to the remainder of the park.

Placement

Generally opposite a quarter pipe, at the other end of a street course.

Material

Metal or concrete generally. This piece does not require coping. It does require a handrail. **Note:** A wedge usually has a flat bank. A quarter pipe can be incorporated, and is usually placed in the centre of the open ramp, but in that case an increase in width is recommended. The edges of the riding surface touching the ground must be flush with the slab surface.

Critical dimensions

Height 1,200mm–2,100mm

Width 2,400mm–7,200mm (incorporated quarter pipe)

Gradient 15 °–35 °

Platform 1,200mm–2,400mm

Curved ledge

The curved face on this obstacle adds an extra element of fun and skill — the rider is able to grind the whole curve and then be 'shot' back into the park (**Figure 28**). This obstacle is used the same way as a manual pad. It suits everyone.

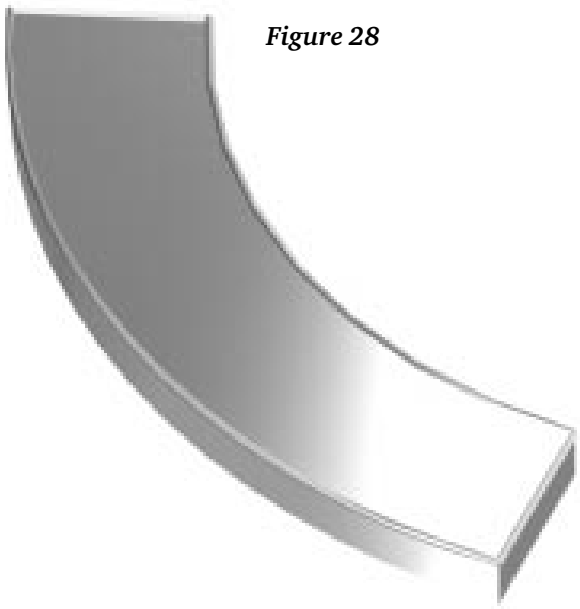


Figure 28

Use

The rider ollies onto the edge of the block and grinds the length of the block, drops off and moves onto the next piece of equipment.

Placement

In a skatepark corner, or along an edge in a slow moving section of the park.

Materials

Metal or concrete with 50mm x 50mm metal edge on all grindable surfaces.

Critical dimensions

Height 100mm–300mm (in-line and BMX 300mm–400mm)

Length 6,000mm–8,000mm

Radius of arc 7,000mm–10,000mm

Mobile ramps

Several municipalities have transportable ramps. These ramps have been particularly useful in providing skate opportunities in rural communities where public transport is limited and where permanent facilities cannot be justified due to the low youth population. There are several different styles of transportable ramps.

Folding steel vert ramps

Like the large ramp used at Moomba, these are big and heavy, but their design is not compromised by transportability. They cater better for proficient skaters.

Timber mini ramps

These come apart and are reassembled for events (as used by Peninsula Events). This type of ramp is designed specifically for events. They cannot be left out in the weather for any extended period.

Steel ramps

These can be moved on a trailer but require a crane to locate, so tend to be costly to site. They are often over-sized, requiring VicRoads permission (and escorts) when moving.

Steel ramps on trailers

These are more easily moved, but since size is limited by trailer width, design can be compromised. They suit more proficient skaters.

Precast concrete endwall and central components with lifting points

These components are heavy (they may be three or more tonnes) and must be moved with a crane. The transition nosing is steel and this is positioned and fixed on a slab using epoxy. The weight of these ramps provides restrictions on the depth of platforms.

The City of Casey has operated two mobile skate ramps since the mid 1990s. The ramps are moved bi-monthly to remote areas on sites with all weather access. Consultation with skaters found they suit older, more proficient skaters best. The frequent relocation of the ramps can be a problem for skaters — many skaters are unaware of ramp locations, and just as they develop skills the ramps may be relocated. The City of Casey plans to develop a number of small satellite facilities to provide venues closer to skaters. The mobile ramps will then remain at the one site for longer periods. Several councils (e.g. Shire of Mornington Peninsula) have mobile skate ramps on a six-week rotation schedule.

Bowls

There are three categories:

- Vertical
- Capsule
- Freestyle

Bowls can be:

- above ground level
- partially in-ground
- totally in-ground

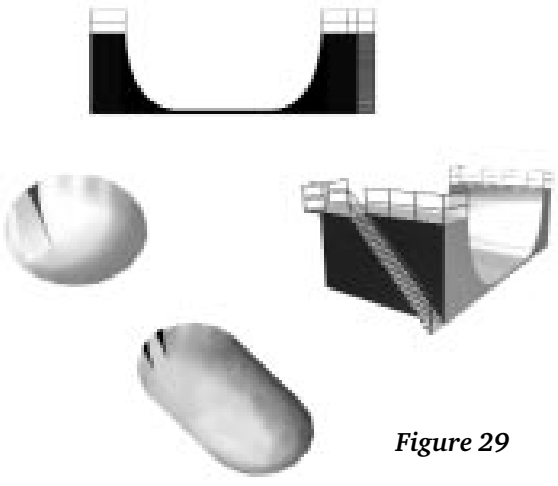


Figure 29

A vertical (or performance) bowl incorporates either vertical ramps or mini ramps, and is based on the same cross-section as either of these ramps (**Figures 29** and **30**). A capsule is created when a straight wall section is added to a performance bowl. A capsule can have the same cross-section as a vertical ramp or a mini ramp. A freestyle bowl is usually a wide flat area for street style skating with banked sides all the way around. A range of ramps or obstacles can be placed in the central flat space.

Vertical (performance) bowl

A vertical (performance) bowl has the same cross-section as a vertical ramp but is circular in plan and has an entry ramp or roll-in (**Figure 31**).

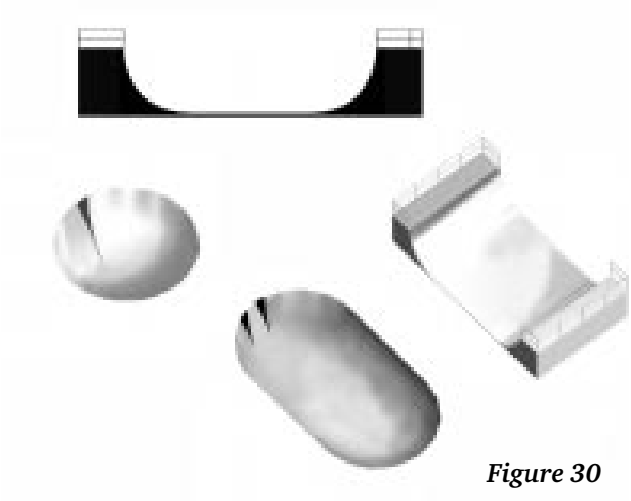


Figure 30

Use

The vertical section of the bowl provides opportunities for aerial vertical manoeuvres. Performance bowls are suitable only for highly proficient riders. **Note:** A common fault in bowl design is insufficient flat. This results in the rider working mainly on the curve and making it difficult to perform tricks. Because riders will not always be crossing the bowl at the widest point on the flat (**Figure 32**), the size of the flat needs to be greater than that recommended for vertical ramps. The diameter of the flat will vary according to the length of the flat and the radius of the transition. Extra flat allowance is required for skaters following line "a" or "c" in **Figure 32**.

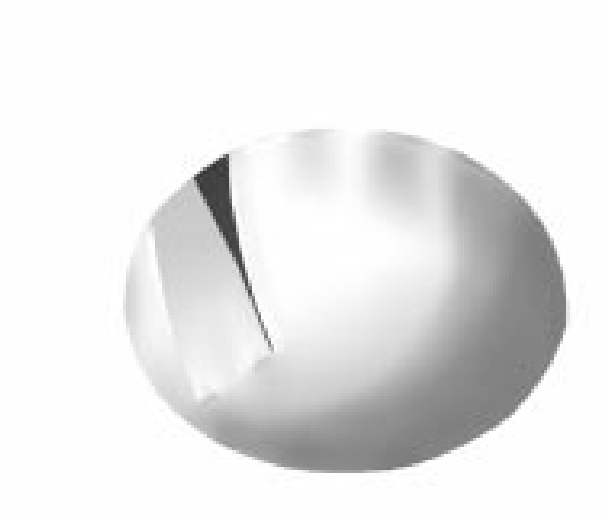


Figure 31

Critical dimensions

Transition radius	2,700mm–3,150mm
Optimum	2,900mm
Vertical plan	250mm–500mm (i.e. same dimensions as vertical ramps)
Optimum	375mm
Diameter (flat)	5,000mm–6,500mm.

Mini bowl

In cross-section a mini bowl has the same configuration as a mini ramp, but a mini bowl does not have a vertical plane and does not require an entry ramp (**Figure 33**).

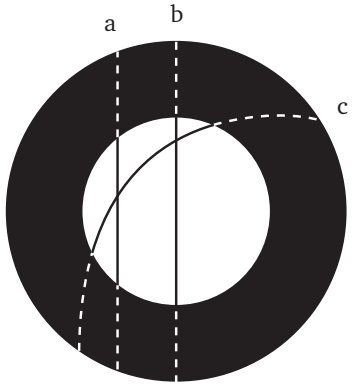


Figure 32

Use

The mini bowl caters for intermediate and advanced riders.

Critical dimensions

Transition radius	2,250mm–2,700mm
Optimum	2,500mm
Dimensions of flat	4,200mm–5,000mm

Vertical capsule

A vertical capsule has opposing straight wall sections enabling it to be ridden like a vertical ramp (**Figure 34**). The dimensions of a vertical capsule will be the same as those for vertical ramps.

Figure 33

Use

A vertical capsule caters for riders with a high degree of proficiency, providing opportunities for aerial manoeuvres off the coping.

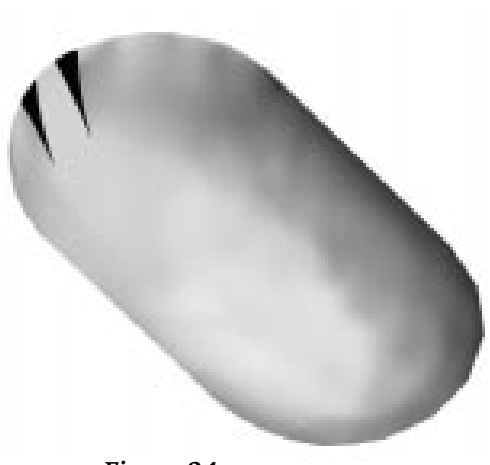


Figure 34

Critical dimensions

Transition radius	2,700mm–3,150mm
Optimum	2,900mm
Vertical	2,50mm–500mm
Optimum	375mm
Diameter (flat)	3,500mm–4,800mm
Length (straight walls)	2,500mm minimum
Coping	See **Figures 4** and **5**

Mini capsule

While a mini capsule has the same cross-section as a mini bowl, its straight walls enable it to be ridden in the same fashion as a mini ramp (**Figure 35**).

Use

A mini capsule caters for a broad range of skill levels. Tricks can be performed off the lip. A roll-in may be incorporated both in the vertical and mini capsule. Locate the roll-in in the centre of one of the straight or longer walls. **Note:** The dimensions of a mini capsule will be the same as those for a mini ramp.

Critical dimensions

Transition radius	2250mm–2700mm
Optimum	2,500mm
Diameter (flat)	2,400mm–3,500mm
Optimum	3,500mm
Length (straight walls)	2,500mm (minimum)
Coping	See **Figures 4** and **5**

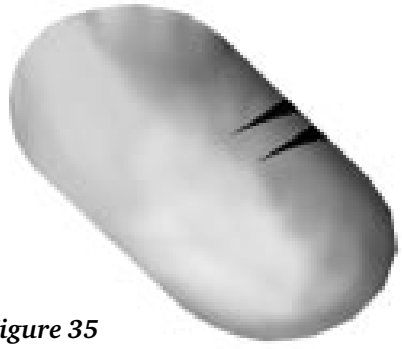


Figure 35

Street skating bowl

This may incorporate:

- launch ramp
- quarter-spine ramp
- grind pole
- quarter pipes
- pyramid
- wedge ramp
- manual pad
- hip ramp

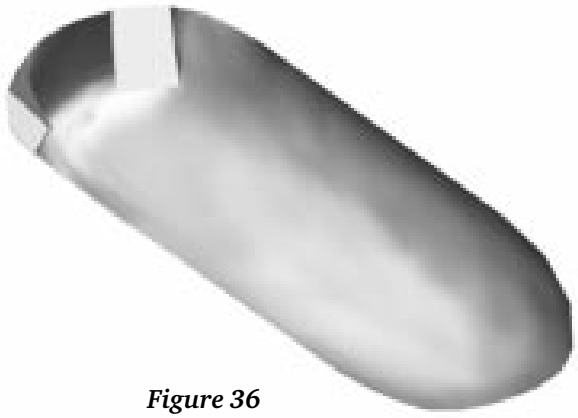


Figure 36

Street skating bowls are usually wide, shallow and flat and may have banked sides. Various obstacles or components can be incorporated into the surrounding lip and also into the middle of this bowl, such as those listed.

Use

Caters for a wide range of ability levels, depending on the nature and height of individual components. This type of bowl is also an ideal training area for novice skaters before they advance to capsules and performance bowls.

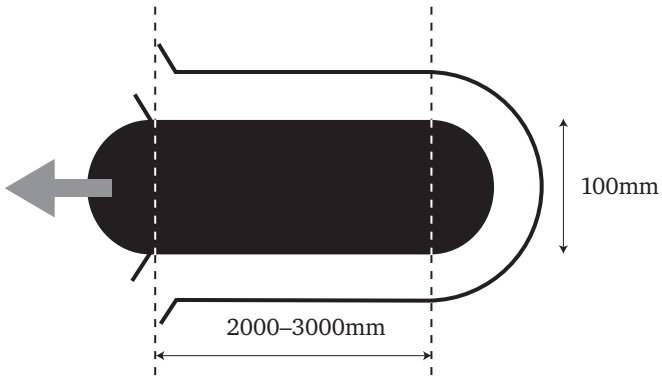


Figure 37

Entry ramps and roll-ins

All bowls and capsules require an entry ramp or roll-in (**Figure 36**). Without this, less experienced skaters will have difficulty entering and exiting the structure. Younger riders have been known to find themselves trapped in this component — and if riders can't get out, they can't be easily retrieved if injured. The perimeter acts as a collection area for skaters. Dimensions for an entry ramp are illustrated in **Figure 37**.

A weldmesh catch fence should be constructed, particularly around the deeper sections. Take care to place the roll-in in the correct and most functional position. This applies especially to capsule bowls. The entry is best located on a flat wall rather than a corner. **Note:** The flat must be adequate, particularly if two obstacles are placed opposite one another, or a mogul is provided in the centre of a bowl. Details for individual features are provided in the section on obstacle ramps.

Critical dimensions

Run-off area 4,000mm (wide)

Flat 2,000mm–3,000mm

Coping

Coping should be integrated into the lip of all bowl types. Details are shown in **Figures 4** and **5**. Note that coping may sit flush with the top platform or footpath, or sit slightly proud as illustrated. The coping of the bowl must be a smooth curve to enable the rider to kick turn and perform tricks from the edge.

What materials should be used?

To a large extent the selection of surface material will determine the material used in the sub-frame and also affect the method of construction. The surface materials used in large ramps are:

- plywood
- mild steel
- concrete
- aluminium
- laminates.

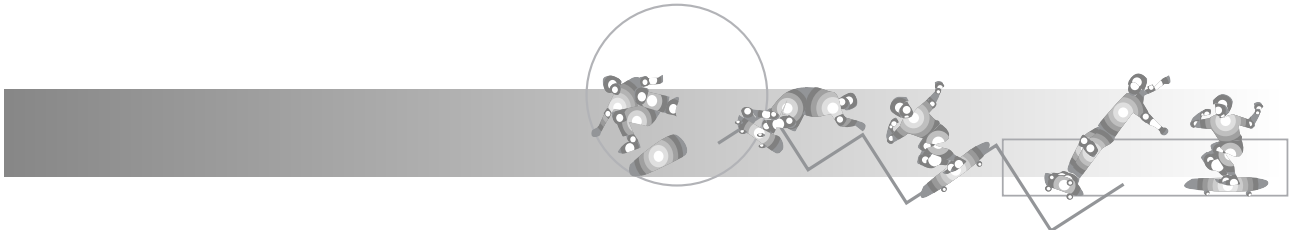
Plywood

Advantages

- provides a surface grip sufficient to allow good control and at the same time allows skaters to slide freely in the event of a fall
- surface grip doesn't vary greatly with temperature change
- less noisy than metal surfaces
- easier to construct and repair
- does not radiate heat on hot days
- relatively low initial cost.

Disadvantages

- relatively high maintenance
- ramps are not generally weatherproof
- relatively short lifespan: replace every six to eight months (surface layer) and every two years (supporting layers).
- surface must be re-coated every two to six months (depending on usage)
- easily damaged compared to metal or concrete surfaces — especially by bikes
- flush butt joints are difficult to maintain
- screws and fasteners tend to work loose
- splinters and gouging may occur.



Critical specifications

- Plywood surface usually consists of two support layers and one top layer.
- Laminate the supporting surface using two layers (99 mm) of exterior grade ply, glued and screwed to the support structure. Seal these layers with primer before applying the top layer.
- Place a top layer of 4 mm marine grade ply fixed at 150mm centres along all edges with countersunk screws only. (Galvanised deck screws are best.)
- To facilitate later removal do not glue the top layer.
- Screw additional fasteners at 300mm centres over the remainder of the sheet. Arrange sheets so that the top layers overlap the butt joints of under layers.
- To increase life expectancy, seal top layer with acrylic gloss or marine varnish.
- This surface will require maintenance to prevent splinters developing and surface joints swelling and breaking up.

Mild steel

Advantages

- highly durable and is unlikely to require replacement within five to eight years
- relatively low maintenance
- not easily damaged
- a good riding surface.

Disadvantages

- temperature changes affect surface friction, and when the metal is hot it becomes slippery
- radiated heat can make skating unbearable
- glare off the surface can make the coping difficult to see (see orientation)
- noise from wheels can be is a significant problem if located adjacent to residential dwellings (if noise dampening is not used)
- sharp edges, rust and corrosion need to be monitored and controlled
- denting of the surface can result in an uneven ride.

Critical specifications

- Use one layer of 3mm–5mm mild steel sheet welded to a steel sub-frame which should provide box channel support at a maximum of 450mm centres.
- Weld all butt joints between sheets using continuous MIG welding. The quality of the weld is critical to prevent heat distortion and reverberation and noise. Grind all welds flush with surface.

Coatings on steel surfaces

Coatings on the steel riding surface to reduce heat are not recommended. They often become sticky with age, making the surface difficult (and dangerous) to skate.

Fighting corrosion

Condensation often forms on the underside of steel ramps. To avoid corrosion coat the underside of steel (or concrete) skating surfaces with a high build, mastic epoxy 125 microns dry film product. **[33]** The edges of steel ramps can also be coated to minimise corrosion. Protective coatings should not extend more than 300mm from the edge of the riding surface into the area where skaters generally ride. The type of coating described above may also provide some limited sound damping.

Noise can be major problem with steel equipment. See the following section.

The City of Brimbank dealt with the problem of moisture and its potential to corrode by pouring footings and installing ramps in the St Albans skate park before pouring the slab. This ensured the ramp butted nicely with slab.

Concrete

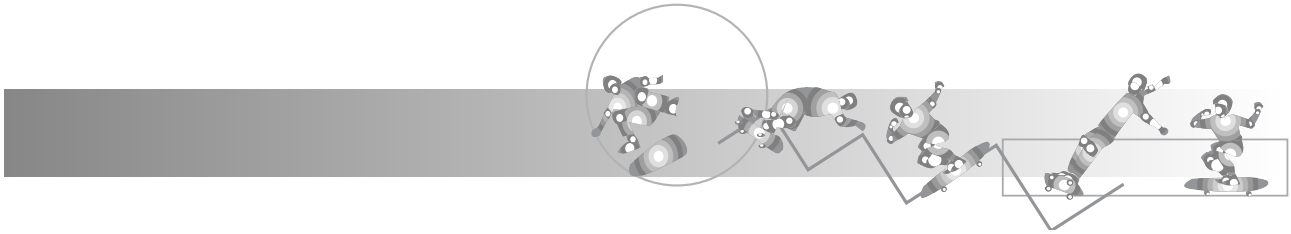
Advantages

- noise is significantly less
- extremely durable
- construction costs can be less, particularly for mini ramps
- difficult to damage
- graffiti can easily be removed with an acid wash
- can be sprayed in situ to create large, in-ground facilities with a diversity of free form shapes.

Disadvantages

- structures cannot be dismantled and rebuilt elsewhere (unless precast components are used)
- large components are heavy and this can lead to compromises in the design of precast ramps (e.g. widths of platforms)
- quality control on the surface finish is critical
- amount of earth fill required to support large ramps at each end usually limits its application to lower structures (e.g. mini ramps less than 2000mm high)
- edges are prone to chipping if not faced with metal
- in-ground facilities may be prone to cracking through shrinkage, ground movement, or poor drainage.

Fibre-reinforced concrete has been used extensively in skate parks constructed by Conquest Skate Parks in Queensland.



Pre-cast concrete components

Advantages

Using precast concrete for relatively standard components has advantages over building the facility *in situ*, including:

- no difficulty in finding reliable contractors
- ability to meet tighter construction schedules
- extra components can be added easily
- components are generally transportable using a crane, therefore they can be relocated or rearranged without demolishing the structure — this creates greater flexibility
- standard mouldings ensure consistent profiles, and quality of surface finish
- heavy, fully enclosed components minimise noise.

Precast concrete can be coloured, is not easily damaged and a high grade of concrete (40mpa) can be used.

Disadvantages

- moulds are costly to make, thus inhibiting the capacity to turn out new components quickly and cheaply
- weight factors inhibit the size of components and therefore extensions (to platforms etc) may be required.

Application

Concrete has been used extensively for skate ramps — from small mini and launch ramps through to larger vertical ramps. Depending on the scale of the facility, pre-cast concrete panels can be combined with an in situ concrete slab to provide the flat. Larger ramps will be constructed using sprayed concrete (shotcrete), against a stable earth fill background.

For large in-ground skate parks, problems of shrinkage and settlement cracking can be minimised by using polypropylene fibre reinforcing, now commonly used in skate park construction. The advantages of a fibre reinforcement product like Fibermesh over wiremesh reinforcing are:

- greater impact capacity and shatter resistance
- lower concrete permeability
- rustproof and corrosion resistant
- three-dimensional residual strength
- harder wearing
- can be used in shotcrete
- evenly distributed polypropylene fibres provide uniform reinforcement without the problem of positioning wire mesh
- minimum required concrete cover. **[34]**

This material works best with articulated joint design, but increase jointing construction, i.e. maximise spacing of 4m. **[35]**

Critical specifications

Concrete strength of 35mpa–40mpa has been used extensively for facilities in Australia. It is critical that the surface is flat and is extremely smooth, otherwise the facility will not be used by skaters. (Refer to *Australian Standard AS3610 — Formwork for Concrete* when specifying the class of finish required.) Advice from the Cement and Concrete Association of Australia (Victoria Region) suggests the following:

Optimum strength	40 mpa
Optimum durability	400 kg/m^3
Optimum curing	7 days
Finish	Steel float

Note: Refer to Cement and Concrete Association of Australia, *Concrete Practice for Builders* [CPB–10].

Wyong Shire's modular system was a design concept developed by the combined efforts of Wyong Shire, a local skater with design skills, and a concrete manufacturer. The system involved the construction of moulds that represented individual skate pieces such as quarter pipes, flat banks and transition wedges. These moulds are filled with concrete up to 100mm thick and cured under factory-controlled conditions. Once dry they are placed on a concrete slab cast in situ, which is the foundation of a skate park. The differing modules are arranged to create street skating and ramp skating areas, with the ability to be re-arranged if users become bored with the same layout. Previously skate parks have been built completely in-situ and cannot be re-arranged without demolishing the structure. This greatly limits their flexibility. The council also undertakes consultation with local users so that, within the limits of available funds, each new skate park provides elements that offer the greatest challenges and enjoyment for users.

Aluminium

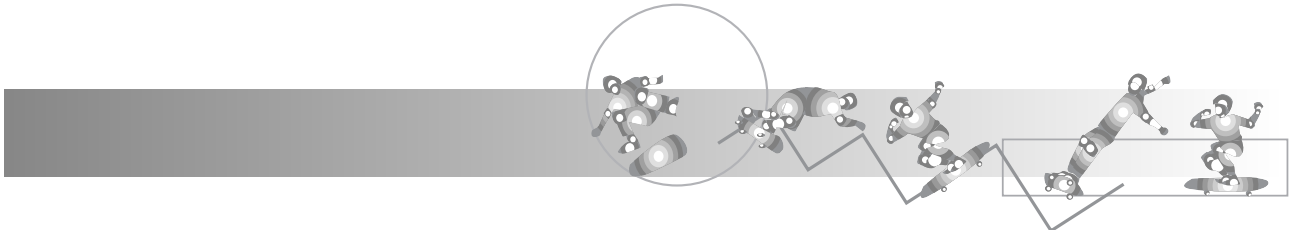
Aluminium provides a beautiful skating surface but is rarely seen because of the expense.

Advantages

- very good weather resistance requiring no painting
- good riding surface, particularly when slightly etched by oxidation.

Disadvantages

- surface glare can be significant
- some distortion of the plate is likely, particularly around high impact areas on the transition
- noise levels will present problems similar to steel ramps
- some surface treatment may be required every six months or so if regular use makes the surface too smooth
- expensive.



Laminates

Phenolic fibre laminates such as Skatelite and Skatelite Pro are state-of-the art riding surfaces designed to be sticky yet fast and extremely durable. They are used on outdoor and indoor plywood skate ramps (not yet readily available in Australia).

Laminates generally don't crack or warp and, when wet, a squeegee is all that is needed to wipe the surface off and start skating. Furthermore, excellent shock absorbency and a no-burn surface reduces a skater's risk of injury.

Critical specifications

- It is of critical importance that the laminate skating surface be in close contact with the substrate.
- The surface material must not bridge the curve of the substrate.
- Galvanised deck screws should be screwed through the laminated surfaces into the joists below the substrate.
- If an outdoor ramp, leave a 1.5mm gap between laminate panels to allow for expansion and movement with changes in humidity.
- The ramp substrate material should be two to three layers of pressure-treated plywood.
- Use angle iron on the sides of the flat sections of half pipes. This will keep the laminate from chipping when kicked while riders get in and out of the half pipe. It will also allow riders to come up by the half pipe and grind the bottom edge without causing any harm to the ramp.
- A steel transition nose should be fixed to the laminate for transition from the concrete to the ramp.

New products

There is some experimentation with other hard court rubberised surfaces for the base of street areas. No data is currently available on the suitability of such surfaces for skating. Some rubberised surfaces are now being used around skating facilities to stop loose material moving on to skating surfaces and to cushion falls.

In the 1980s other materials, such as plexiglass and fibreglass, were used. Susceptible to damage, particularly in public places, and sometimes slippery and expensive, they are rarely used now.

Sub-frame materials

Choice of surface material will determine the materials used in the sub-frame, and also the method of fixing.

- A plywood surface for indoor ramps is best supported by a timber sub-frame which enables screwing and gluing of all joints.
- A steel surface should be supported by, and welded to a steel sub-frame.
- Laying thin steel sheet over plywood underlay is not recommended. It is difficult to prevent fasteners from working loose and hard to weld the butt joints without causing damage to the timber underneath.

- If timber frames are used for steel ramps they should be mounted on steel plates, keeping the frame 10mm off the ground to avoid timber deteriorating.
- An aluminium surface needs to be welded to an aluminium sub-frame to avoid the problems encountered with steel.

Putting it all together: safety, layout and placement

Ramps: important safety considerations

There are important design features determining the safety of vertical ramps, mini ramps and composite ramps. The height of a ramp has often incorrectly been used as the main criterion for determining the relative safety of a ramp. Although higher ramps may be more intimidating for some users, they do not necessarily present a greater risk. The following design considerations are particularly important when analysing the safety of vertical ramps.

The City of Brimbank found that wayward shopping trolleys were using the vert ramp, so a pole was installed on the stairs to stop them being brought up.

Coping

This helps keep the board on the skater's feet when performing aerial manoeuvres. However, if the overhang created by the coping is too great, the rider will 'hang up'. It is critical, therefore, that close attention be given to the correct design and installation of pipe coping. Ensure that a seasoned skater checks the design of coping prior to construction (see **Figures 4** and **5**).

Drainage

Where possible, it is recommended that street ramps with a flat top should have a fall of several millimetres to prevent water ponding on the surface and causing corrosion in steel ramps. For the same reason, where ramps are constructed in floodways, they should be elevated at least 100mm above grade.

To minimise corrosion of fully enclosed metal ramps sitting on concrete, provide holes in the ramp to allow airflow underneath. Minimise possible depressions in the slab where water may pool around the frame or the edges of the ramp on the ground. Put packers under the steel ramp or frame to isolate the slab and ensure it is not exposed to any moisture collecting there.

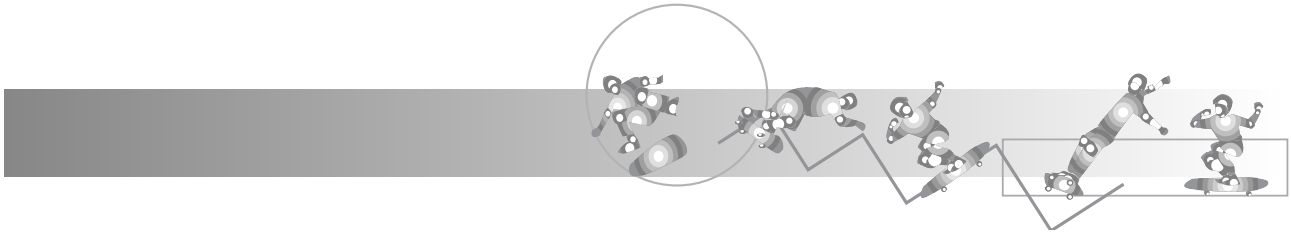
Enclosing ramps

Sometimes it is desirable to enclose a large ramp — not just for noise. Don't use mesh to enclose the undersurface of the ramp as this may allow rubbish to blow in, and collection and cleaning difficult (see also Noise in this chapter).

Fencing

Fencing and handrails are required on items of equipment (see under design components). The most appropriate type of fencing is generally a 1.5m (minimum) weldmesh style that will also catch airborne equipment.

Bowls and in-ground facilities generally require fencing to stop people falling into them accidentally, and to stop other park users from straying too close.



Where facilities are close to busy roads, fencing may be required to minimise the risk of young children overshooting or running out onto the road. The type of fence most appropriate in this instance is a swimming pool safety fence with a child proof latch.

Care should be taken not to place fencing so close to facilities as to interfere with manoeuvres. Also, if the fence is too close it may suffer damage from frustrated skaters.

Fencing to keep people out of skate parks after hours is rarely successful. There are many instances where ramps have been located in pool grounds and the fence has been continually damaged by young people wanting to use the facility after hours

At the Craigieburn bowl, kids pulled down the fence because it was too close to the edge.

Flat

If the flat is too short, the rider will not have enough time to react between the two transitions and consequently may be unable to regain balance correctly before riding the opposing curve.

Grit into wheel bearings don't go

Beware! Near the beach, adjacent to dirt jumps, in an area where mulch from gardens beds or softfall materials from nearby playgrounds can encroach, there is a danger to skaters — because loose material and wheels don't go well together.

Furthermore, debris on the skating surface is one of the biggest causes of injury to in-line skaters. The design needs to ensure that:

- a barrier is created between any loose material and the skate surfaces, and
- grass areas (prone to wear) do not immediately abut the paved skate park or single items of equipment.

Height

Ramps are not always built at ground level. Where ramps are constructed on foundations, the height above ground should be kept to a minimum. In flood-prone areas, consider raising slabs and ramps so that the lowest level of the flat is 100mm above grade.

Landing platform

This is required for vertical ramps, mini ramps and composite ramps (see **Figures 1** to **13**) to allow entry on and off the ramp. A landing platform with a guard rail should be provided on each side of the ramp.

It is recommended a weldmesh fence no lower than 1.5 m be provided as a barrier to catch airborne boards. This guard should extend to the perimeter of the platform. The width of the platform should be a minimum of 1.5m. One set of stairs should be provided to the main landing platform. However, stairs should only be provided at one end in order to discourage skaters dropping in from opposing sides. Enclosed weldmesh hand-railing to the minimum height of 1.5m should be provided along the staircase.

Stairs should always be located behind the ramp, as shown in **Figure 1**. If the staircase projects from the side, skaters may run into it.

Lighting

Teenagers are often nocturnal in their habits. Indeed, teenagers and late nights go together. It is inevitable that they will want to skate at night. Consider:

- there are safety implications to night skating — because more accidents happen at night: debris, edges (and others) cannot be seen, tiredness may affect ability or judgement, others can't see you (e.g. vehicles), and dappled light affects visibility.
- the impact on adjacent residents of noise and light at night
- the need for security lighting for other park users
- whether users will try to skate by car headlights
- lighting should not be provided if noise is likely to be a problem.

Radius

The larger the radius of a ramp the less chance of an injury occurring. The rider will fall onto the slope and 'slide out' of the fall if the ramp is correctly designed. If the curve is too tight the rider will fall closer to, or onto, the flat and will have no slope to slide along to soften the impact of the fall.

Shade

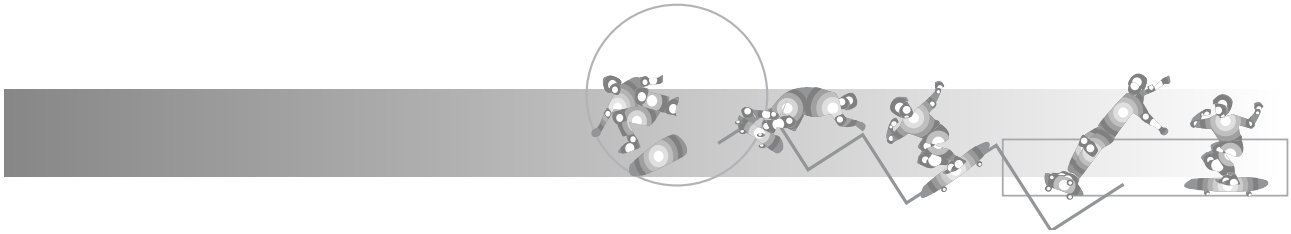
Shade needs to be offered at all outdoor facilities. Include shade trees in the vicinity of the skate park and shade structures on the edge of the facility.

- Put shade structures where skaters already sit or stand, not where you think they should.
- Dappled shade on skating surfaces is not a good idea — it may affect skaters' visibility.
- Place shade in rest areas, not the other way around.
- Ensure robust construction to withstand unintended use.
- Avoid using trees that drop excessive leaves, litter or nuts.
- Liability claims for skin cancer will occur in the future, according to the Anti-Cancer Council.

The Shire of Yarra Ranges modified a bus shelter design to provide shade and seating adjacent to the Lilydale Bowl. It has no back to ensure good visibility through, and has a checker plate roofs. The posts are outside the bowl, offering shade from 11am to 3pm (peak sun times). The roof is kept high from lip of bowl.

Stairs

Stairs are not required for public mini ramps. In fact, stairs may encourage small children to launch from the top of a ramp when they may not be skilled enough to ride. If there is no stair, unless a skater is skilled enough to skate up the vertical, they cannot get to the top (see also information under Landing platforms in this chapter).



Transition from ramp to flat

The transition from the flat surrounding surface to a ramp is one of the most critical aspects of skate parks design. If poorly treated it can mean excessive noise, a major hazard to users and low use of the components.

Vertical

If the height of the vertical is greater than 500mm, the rider will have difficulty successfully using the coping to control aerial manoeuvres.

Width

Ramps less than 4 m in width are not safe for general skating. The narrower the ramp, the greater the chance of riders coming off the side as they come out of the transition. Beginners need a greater area because they have less control over the skateboard as they ride out of the transition.

Integrating the design with surrounds

- If a skate park is to be part of a larger reserve, master plan the whole site before designing the facility.
- Ensure the busy activity of a skate park is compatible with its proposed environs.
- Consider how to integrate hard areas with any adjacent green areas.
- Integrate the facility with the existing path network and circulation routes.
- Don't forget drinking water, seats, and bins.
- Refer to checklists on location and siting in Chapter 5.
- Ensure the design deals with likely wear of grass at the edges of the facility, and ensure loose materials (dirt, sand, mulch) can't travel onto the skating surface.

If a skate park is to be part of a larger park, engage the services of a qualified landscape architect to ensure that the facility is successfully integrated into the landscape and other park facilities.

Layout and placement

How close?

The layout and placement of equipment and flow of traffic is very important in a skate park, especially if users with a wide range of proficiencies are likely to use the park. Ramps should not be positioned too close to other structures, such as walls or buildings. A clear space of 3m–4m is recommended.

Distance between components

As a general rule, for any high speed components such as fun boxes, pyramids, quarter pipes, wedges, start ramps etc, allow at least 5,000mm for setting up but no more than 10,000mm. This distance is for travelling within the direct line of motion.

- If the obstacle (pyramid etc) has a ramp off to the side, allow 5,000mm–7,000mm of clear space so the rider can land without fear of crashing into another obstacle.

- For low speed areas, such as a beginners area or where there are grind poles, manual pads etc, these components can run parallel or in line, a few metres apart.
- The closer together the obstacles the faster the park, and the more experience skaters must have to be able to use it. Obstacles placed too far apart will create too many dead spots — especially for BMXers, who prefer a succession of jumps of different heights to keep up a rhythm.

No cross patterns

Set up ramps so runs are roughly parallel. While cross patterns might maximise available space, they are an invitation to disaster.

Orientation

To avoid skaters having collisions and getting blinded by the sun, have the skate park's direction of motion oriented north and south. To have an east–west orientation would cause riders to face extra danger by skating into the sun in the morning and again at sunset — an avoidable risk.

Noise considerations

Noise from the loud conversation of young people, and the noise of skateboard wheels as they move from one surface to another on steel ramps, can be a source of annoyance to neighbouring residents. But in comparison with other sports, there are no coaches, no teams and no parents in the stands — and concrete skate surfaces provide even less noise than footpaths. However, skate facilities are often provided in local parks just behind rear fences, and where they can, skaters will try to use them at night.

Steel facilities without acoustic treatments are generally noisier than other materials. The amount of noise which can be generated from steel ramps without acoustic treatment varies as a result of:

- type of general use (bike, skateboard, in-line skate, roller-skate etc)
- type and make of skateboard wheels, construction material, the speed of wheels, the weight of the rider, temperature of wheels, or a combination of these. **[36]**

There are some key steps to minimising the noise (and the impact of the noise) from wheels on steel ramps, and to a lesser extent conversation from users.

Siting to reduce noise

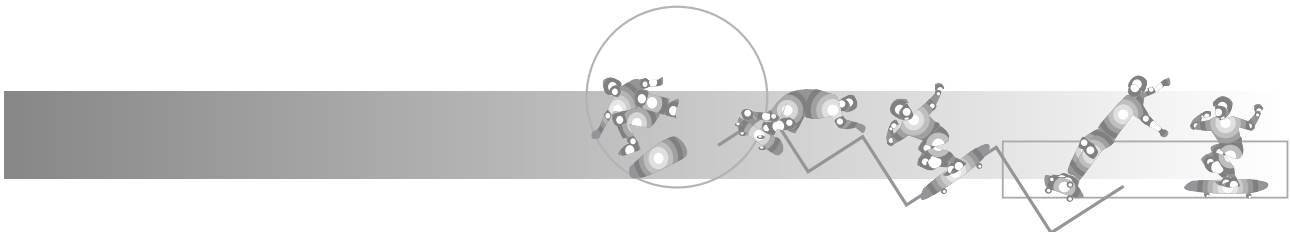
Site skate facilities and steel ramps a minimum of 100m from adjacent dwellings (desirably 200m).

Landscape design

- In-ground and concrete facilities are quieter than untreated steel ramps and equipment.
- Set the facility into the landscape, away from residences.
- Noise barriers can be constructed from a variety of materials: earth, timber or perspex.

Measuring noise

A qualified noise control engineer is recommended for the measurement of noise. Noise measurements should be made in accordance with the *State Environment Protection Authority Publication No. 280m: A Guide to the Measurement and Analysis of Noise*.



The City of Frankston researched noise emanating from a skate facility, did a walk test, and found unacceptable levels carried as far as 200m.

When the City of Wyndham moved the Werribee vert ramp to Mossfiel, sound dampening measures were taken — and anecdotal evidence suggests they were successful. A 10mm thick rubber pad was placed under each of the uprights of the ramp to reduce the noise of the steel ramp structure on the concrete base. The underside of the ramp was lined with 2mm thick aluminium foil and then coated with a 500mm coat of Fibertex 450 spray foam. After the foam had been installed, the ramp structure was encased by corrugated iron clad sheeting to further reduce noise emission.

The City of Greater Shepparton will use foam as a dampening compound on the under surface of their ramps. This is used in cool stores locally and therefore with the availability of local skills, material and contractors this method has been cost-effective.

The Shire of Yarra Ranges retrofitted the ramps at Healesville Skate Park to reduce noise. On the advice of MDP Construction & Engineering Pty Ltd, they used a steel membrane over an acoustic damping compound with absorption, fixed to the underside of the ramp, and heavy gauge steel acoustic panels over the frame to enclose the ramp. The results of this treatment were a reduction in average noise levels from the park of 13–20 dB(A) depending on time of day.

Construction to reduce noise

- Use qualified tradesmen to ensure high-quality welds, appropriate materials and standard of work, to minimise noise.
- To reduce noise emission (as well as to extend their life), steel ramps should be constructed with heavy gauge steel skate surfaces and 50mm square or rectangular hollow-section support structure.
- Ramps should be seated flush with the slab surface and secured to concrete using masonry anchors around the perimeter of the frame.

Retrofitting and noise dampening [37]

- Acoustic treatments installed on the underside of the skate surface may reduce the peak noise of wheels on steel ramps by as much as 25–30dB(A).
- Factors determining the best method of acoustic treatment are: noise reducing ability, lifetime cost (based on weather exposure, sunlight, water and aging), and resistance to damage.

  Some options for acoustic treatment include:

- A steel membrane over an acoustic damping compound fixed to the underside of the skate surface.
- Spray a dampening compound on the underside of the skate surface. **Note:** where coating or foams are used they may be flammable, necessitating enclosure of ramp supports.
- Application of a rubberised film or membrane to the underside of the steel.
- Enclose the ramp by welding heavy gauge acoustic panels around the perimeter of the frame.
- All connection points should be treated with a sound absorption and anti-vibration compound. Bitumen has been used in some cases. While this is a relatively inexpensive treatment, the level of noise reduction is generally low. Innovative use of materials available locally may be appropriate — and cost-effective.

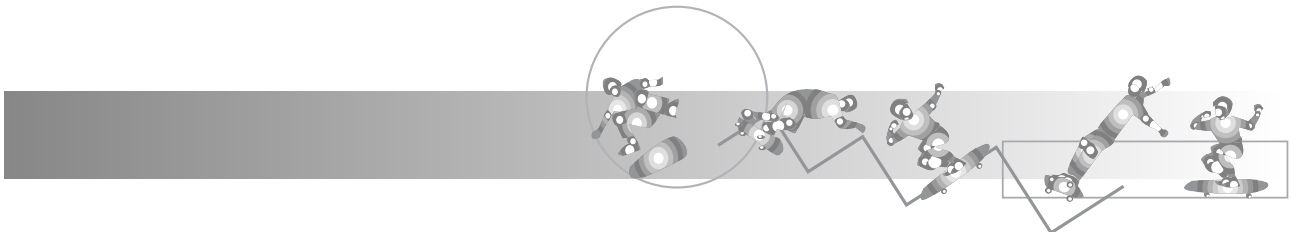
Risk management ... at the design stage

The siting and design of structures can affect the safety of users, and impact on the cost of maintenance. However, the challenge factor for skaters should not be downgraded in the design process because of concerns for safety, as potential users will simply seek challenge elsewhere.

It pays to make risk a major design consideration, and get the best advice early. Here is a quick check list for the design stage.

Skate park design checklist

- ☐ All structures have been designed in accordance with the critical dimensions provided.
- ☐ All structures have been designed in conjunction with professional skaters and design professionals.
- ☐ Drawings and specifications have been scrutinised by an experienced skater prior to construction to meet minimum tolerances.
- ☐ Skaters are involved in assessing tenders and supervising construction.
- ☐ Arrangements have been made to ensure the standard of construction is extremely high, that all gradients and angles are in accordance with the specifications, and all skating surfaces are smooth.
- ☐ Ramps have been tested by an appropriately qualified professional and a professional or highly experienced skater for degree of difficulty.
- ☐ Facilities are designed to cater for a range of proficiencies.
- ☐ Structures are graded for different levels of proficiency and separated in the design.
- ☐ Access to the facility by shared pathway is provided and is away from major roads.
- ☐ Walkways are located at a safe distance from skaters, for safe and easy access.
- ☐ Cross movement between street elements and potential for conflict between users has been minimised.
- ☐ Barriers are attached to appropriate structures on the edge of the site to minimise users entering and colliding with riders using equipment.
- ☐ Equipment is positioned away from floodways and major roads or provided with safe crossing areas.
- ☐ Facilities have provision for adequate drainage.
- ☐ Surfaces are a sufficient distance from loose materials to prevent them moving onto the skating surface.
- ☐ Higher structures are sited on the edge of the area so falls are less likely to result in collisions with other users or other equipment. Grass verges may also provide better cushioning than concrete.
- ☐ Easy access to a phone and first aid, and to the site — for emergency vehicles — is provided.
- ☐ Indoor facilities are equipped with adequate lighting, panic hardware, and properly marked exits.
- ☐ Park and equipment positioned with north-south orientation so riders can see coping, edges, and other riders.
- ☐ Any flammable coatings or foam used on the undersurface of ramps to dampen noise are enclosed (to prevent ignition).
- ☐ Narrow areas between the skate park edge and existing structures are paved to minimise hazards, reduce maintenance and limit the presence of loose materials.



- ☐ Shade structures or trees are sited in the vicinity but at a suitable distance to minimise interference with riders and reduce possibility of leaf litter, bark and fruits falling on the surface.

Signage

Signage at facilities is necessary to educate, to inform and regulate activity, to reduce possible dangers, and disclaim liability. Signage should not be the only means of communicating safety and education messages. Some skaters may perceive signs as establishment and authoritarian and ignore them.

- Keep language on signs simple, and use picto-grams, to convey the message.
- Where possible, try to use positive wording rather than simply prohibiting activities and making demands. Instead, make recommendations or suggestions.
- Many councils have found it useful to develop rules or codes of behaviour for skate facilities and display them via a sign.
- Elevate signs to avoid damage (e.g. place high on a wall).
- Avoid using vinyl lettering on signs as they are more easily damaged (e.g. peeled off).
- Demonstrations, clinics, come-and-try days, skate programs and hands-on tuition involving local skating personalities will be more effective than any signage. Signs however are important for reinforcement, and to inform visiting skaters.

The City of Melbourne, as part of its skate safe program, located skate-safe signage throughout general community areas and on unsafe footpaths. In conjunction with traders and skaters it also designated and clearly marked no-skate zones across the city.

Consider white on black signs — it helps to avoid graffiti. Or get young people involved in the design and planning of signage (as the City of Hume has).

What should be on a sign?

While signs include educational information, conditions of use as well as safety information, the wording is important and its consideration should form part of a risk management strategy. Refer to the section on signage in Chapter 7: Safety and Risk.

Include on signs an emergency phone number and where possible the address of the facility operator.

The City of Hume will involve their skaters in designing and painting signs to ensure the content has greater impact and to minimise damage.

Other information on signs

Other information that may be appropriate on a sign might include:

- "This park is for bikes, blades and boards" or "This park is only for xx."
- Please observe park hours — xx am to xx pm.

- Please keep noise to a minimum.
- Please keep food or drink off the skating surface.
- Additional obstacles or other materials (ramps and jumps) may not be brought onto and used at the skate park.
- People who wish to run events please contact the council well beforehand (permits may apply).
- All school groups shall be supervised and are permitted only after students have had formal instruction by appropriately trained personnel.
- Signs may be used to name, label and grade facilities. However, colour coding (with a coding key printed on signs) may be more effective.

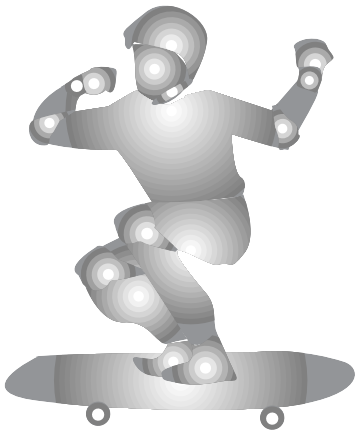
Signage checklist

- ☐ Signs will be installed before the facility can be used.
- ☐ Skaters are involved in the design, wording (and possibly the making) of the signs, for maximum impact.
- ☐ A sign is placed on the side of the facility most likely to be entered first, and not within the fall zone of any item of equipment.
- ☐ Wording is checked for legal and insurance implications.

7. Safety and risk

Key questions

- How dangerous is skating?
- Does local government enjoy a privileged legal status?
- When will a council be negligent?
- Which are the high risk circumstances?
- How can good design help?
- How important is an effective maintenance program?
- Supervision?
- Signage?
- Inappropriate users?
- What if something goes wrong?
- What is a risk management plan?



"Management of risk is an integral part of the reform of the public sector … The alternative to risk management is risky management." Guidelines for Managing Risk in the Australian and New Zealand Public Sector **[38]**

Risk management is an essential part of good business practice, so it follows that management of risk is an integral part of business practice in a reformed public sector. In the case of skate parks, the objective is to find the right balance between on the one hand encouraging young people to undertake a (potentially harmful) recreational pursuit of their choosing and on the other hand meeting community expectations about their safety.

The vulnerability of young people gives rise to a more onerous duty of care which the law imposes on those who provide an amenity for them. This vulnerability should be assessed in the context of the inherent danger of the sport or recreation.

Dr Russ Scott, in his paper "Risk Management — Concerns for Organisers of Children's Sport", said:

- *The physical attributes of children, their small stature and strength, renders them more vulnerable to injury.*
- *Children can be impatient, impulsive, over confident, unpredictable, inconsiderate and aggressive when playing sport.*
- *Children may not have the maturity to make reasoned decisions in governing their actions during sport.*
- *Children may not have the capacity to perceive or consider the risks of their actions or the actions of their sporting co — participants.*
- *Children may not have the capacity to recognise the inherent risks of the sport being played or the dangers of equipment or facilities.*
- *Children may lack the insight or recall to apply their previous experience to avoid injury in sport.*
- *Peer pressure can make children feel compelled to participate in a sport or a particular activity.*
- *When supervised by an authority figure children may suspend their own limited instincts of self — preservation.* **[39]**

How dangerous is skating?

Recorded injuries

Analysis by the Monash Accident Research Centre of presentations to hospital departments in Victorian Emergency Minimum Dataset (VEMD) participating hospitals between 1996 and 1999 indicates that the incidence of skateboarding and BMX injuries is significantly below that of other sports and activities. It also suggests that as age increases the incidence of injury reduces and is lowest at 15 to 19 years.

Table 7: Presentations to Victorian emergency departments by age and factor

Factor	5–9yo	10–14yo	15–19yo	Total	%
Bicycles (not BMX)	1,692	2,470	1,487	5,649	4.1
Passenger cars	612	744	3,806	5,162	3.8
Aussie Rules	257	1,362	2,155	3,774	2.8
Play equipment	1,863	430	46	2,339	1.7
Basketball	175	1,053	1,004	2,232	1.6
Motorcycles	200	552	1,309	2,061	1.5
Horses	251	639	534	1,424	1.0
In-line skating	347	706	204	1,257	0.9
Dogs	517	393	300	1,210	0.9
Soccer	103	462	503	1,068	0.8
Netball	24	398	473	895	0.7
Trampoline	525	266	35	826	0.6
Cricket	157	325	282	764	0.6
Skateboards	79	350	272	701	0.5
BMX bikes	14	79	65	158	0.1
Other	31,078	33,337	42,659	107,074	78.4
Grand total	**37,894**	**43,566**	**55,134**	**136,594**	**100**

Source: VEMD July 1996 to June 1999. Prepared for Jeavons Recreation & Tourism Planners by MUARC.

Thirty-nine per cent of the injuries to skateboarders recorded by Victorian hospital emergency departments up until 1996 occurred on a public road, footpath or parking area, as compared to 16 per cent on ramps and bowls etc. It is likely that these are similar to day. **[40]** Data on skateboard injuries in the USA compiled by the National Safety Council and the US Consumer Products Safety Commission for 1997 indicates a not dissimilar situation to Australia with a number of key sports showing much higher injury rates than skating. See the following table.

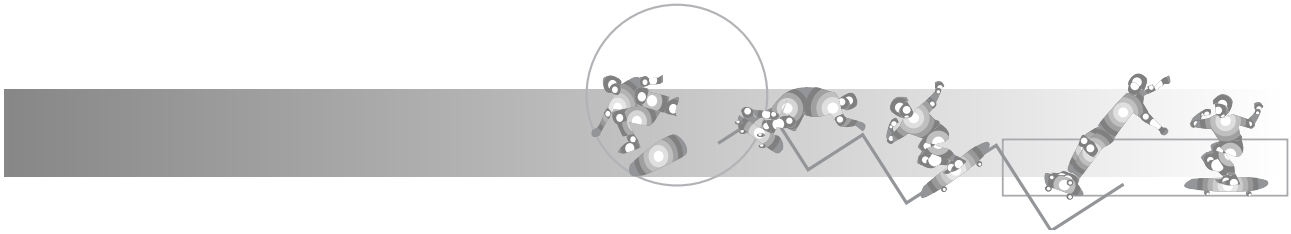


Table 8: Injuries by sport USA

Sport	Players ooos	Injuries	%
Ice hockey	1,700	61,264	3.60
Football	14,700	409,296	2.78
Basketball	29,600	761,358	2.57
Soccer	10,300	146,409	1.42
Baseball	36,600	437, 207	1.26
Volleyball	20,500	112,120	0.54
Skateboard	6,200	27,718	0.49

Source: National Safety Council, US Consumer Products Safety Commission website. **Note:** Comparable participation figures for each of the activities in the Australian research are not available.

A review of literature on in-line skate injuries found that: **[41]**

- In 1997, over half (53 per cent) the in-line injuries were fractures and a further 22 per cent were sprains. Fractures to the forearm and wrist made up 40 per cent of the injuries.
- A typical fall involves a young novice wearing little or no safety gear who loses balance while skating outdoors or falls after striking a defect or debris.
- In — line skating, skateboarding and roller skating injuries occur mostly on public roads and footpaths, or outside the home — 23 per cent occurred in places used for recreation.
- Head injuries made up 3 — 7 per cent of in-line injuries, but 77 per cent of these occurred among children 5 — 14 years.
- Falls were the most frequent cause of in-line skating injuries, accounting for up to 77 per cent of all emergency hospital presentations.
- Injuries sustained to male skaters tended to be more serious than those sustained by females.

There is also evidence to suggest wrist guards reduce the risk of wrist injuries by 90 per cent, and a helmet will reduce the risk of head injuries by 85 per cent. **[42]**

Key strategies recommended by the Monash Accident Research Centre to reduce in-line injuries:

- *Target safe skating programs to young skaters just prior to school holidays.*
- *Introduce pre-season skating and fitness training programs in late winter (like the Australian Physiotherapy Association's "Get fit to Ski" classes)*
- *Encourage skaters to make themselves visible by either skating in daylight or wearing bright reflective clothing if skating at night.*
- *Promote images of role models wearing protective clothing.*
- *Teach skaters the rules of the road.*
- *Promote safety instruction by certified instructors in order to teach stopping techniques and safe skating practices.*

Source: *Shauna Sherker & Erin Cassell, In-Line Skate Injury — A Review of the Literature, Monash University Accident Research Centre for Sport and Recreation Victoria, 1998.*

Does local government enjoy a privileged legal status?

No, local government does not enjoy a privileged legal status when it comes to legal accountability. In the 1990s the High Court (in *Nagle v Rottnest Island Authority 1993 112 ALR 393*) reaffirmed the following principles:

- local government does not enjoy any particular immunity in relation to public liability
- the ordinary principles of negligence will be applied to determine liability, and
- the burden of the duty of care cannot be delegated.

Perhaps because local councils and schools are perceived to be more responsible or perhaps because they are insured for public liability, there is certainly a trend towards more litigation against public authorities.

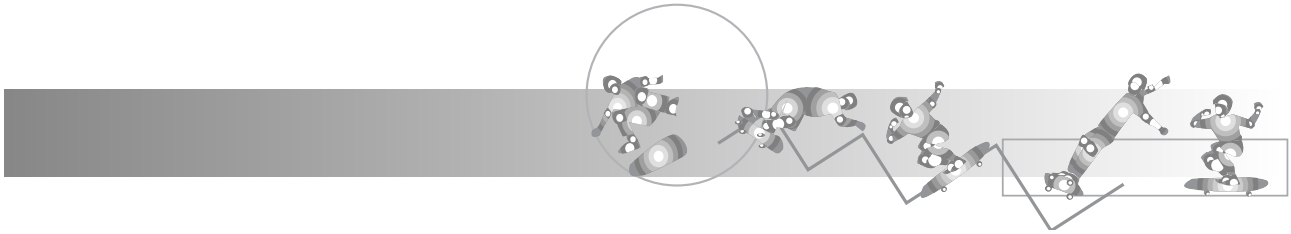
This chapter assesses the potential legal liability of councils under common law. It does not canvass all potential bases of legal liability. In fact, negligence not only gives rise to liability for damages in civil law; skate facility occupiers can also bear liability under various statutes including the *Occupiers Liability Act* 1983 (Vic). Councils may owe additional duties to employees engaged to manage or supervise skate facilities, but those liabilities — which may involve criminal sanctions — are not addressed in this chapter.

Liability will arise if harm can be attributed to the breach of a duty. That is, what a reasonable person should, in the circumstances, do by way of response to a foreseeable risk. A prerequisite for any such duty is that there be a degree of proximity of relationship. **[43]**

When will a council be negligent?

The history of skateboarding tells us how influential the insurance and liability issue is: the demise of large skate parks in the 1980s in the USA was in response to fear of being sued and an inability to gain insurance cover.

In the 1990s the situation reversed and many States of the USA passed laws which classified skateboarding as a hazardous recreational activity, thus placing responsibility for injuries back onto the



user and reducing concerns about insurance premiums or litigation. **[44]** However, that approach has not been followed in Australia and the laws of occupier liability and negligence still apply to councils' conduct. The Victorian *Occupiers Liability Act* 1983 requires that occupiers "take reasonable care to avoid a foreseeable risk of injury to persons who enter upon his land". This includes:

- gravity and likelihood of injury
- circumstances of entry
- knowledge that the occupier has or ought to have of persons being on the premises
- the nature of the premises
- the age of the persons entering
- their ability to appreciate the danger
- burden on the occupier of eliminating the danger as compared to the risk of danger.

In 1998, the Skateboarding Liability Law AB 1296 introduced in California classified skateboarding (along with a number of other activities such as mountain biking, boating, hang gliding, kayaking, rock climbing, rodeo, pistol and rifle shooting, and skydiving) as a hazardous recreation activity, thus placing the responsibility for liability on users. This caused a fall in the previously prohibitive cost of insurance premiums and a rise in the number of skate parks being developed across California.

The concept of negligence [45]

As a general rule, liability arises where a duty to exercise reasonable care is owed by one person on to another. The person exercising that duty should know that a failure to do so properly will result in loss or damage to another person.

Where a claim for negligence is made, the onus of proof is on the plaintiff to prove the three elements set down by the courts. The first is that there was a duty of care owed by the defendant to the plaintiff. The second is that the defendant breached that duty of care. The third element is that he or she has suffered material injury, loss or damage as a result of the breach of duty to take reasonable care.

In assessing the degree of liability, the courts take into account the extent to which the actions of the person who is injured have contributed to the amount of the loss or damage being claimed. Councils must make decisions balancing their potential for liability against the needs and the wants of residents.

When a claim arises, key matters which are being taken into account by the courts to determine whether the provider of a facility has been negligent might include:

- how the equipment was used and installed
- whether the equipment was properly maintained, and
- whether proper consideration was given to the range of people likely to use services.

Councils should operate on the presumption that simply by providing a skate facility they have a duty of care to those who use it. This presumption is regarded as fair because:

- skating involves inherent risk of injury
- users include young children, and

- users include the experienced, the intermediate skater but also the novice.

The issue for councils is not whether the duty exists but whether they can demonstrate that they have satisfactorily discharged that duty. Potential liability of councils can be reduced if:

- the claimant has voluntarily assumed the risk
- the claimant has contributed to the injury by his or her own contributory negligence, or
- if there is legislation in place which protects public authorities.

Because of the particular vulnerability of children, councils should not assume that they will be relieved of liability because of a user's own conduct. Also, there is no legislation which operates as a bar to legal proceedings by infant users, unlike the position in some parts of the USA.

What are the high-risk circumstances?

- Before the skate park opens
- Design and construction
- Maintenance
- Supervision
- Signage
- Exclusion of inappropriate users
- Response to accident, injury and emergency
- Information

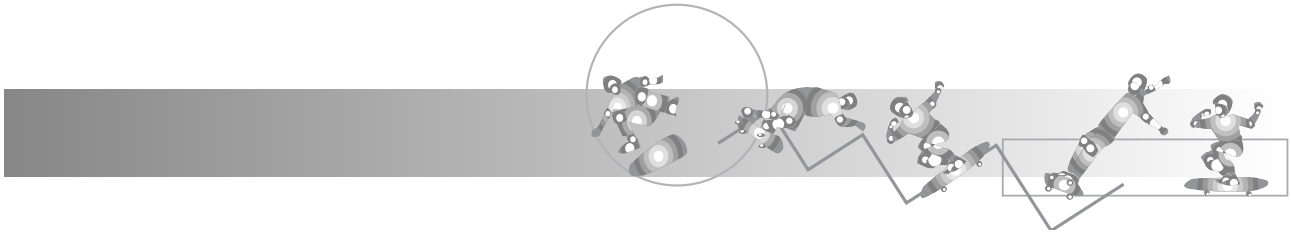
It is not possible to describe every potential risk circumstance. However, to assist in the development of a risk management plan, this section provides information on the issue of liability under a number of sub — headings, each of which describes an area of council responsibility where liability could arise.

Before the skate park opens

Ensure safety instruction and education for skaters is provided before the park is opened. Education programs for skaters can be provided as part of a communication and consultation strategy. A culture of respect and responsibility can be fostered in users to avoid conflict, minimise damage and reduce accidents. In fact, this consultation process may have beneficial results:

- the enthusiasm for the project may result in a community group being formed which may assist a council to discharge some of its responsibilities for the skate park
- it may raise site — specific issues for inclusion in signage, and
- it may identify particular interest groups whose views, whether supportive or critical, will contribute to a better risk management plan.

Some councils have found it helpful to develop simple park rules or codes of conduct.



Educational measures

Educational measures that may be introduced before the skate park opens include:

- informing skaters about the common causes of injury, and dealing with injury (i.e. RICER — Rest, Ice, Compression. Elevation, Referral)
- encouraging users to report hazards
- exposing skaters to safety issues through the design process, including signage
- holding clinics and demos before a park is officially opened to get the culture right (and keeping them going on a regular basis)
- installing signage before the park is skateable
- involving local schools in programs.

How can good design help?

Good design is a key to safety. Some of the critical issues include:

- gradients and radii on curves, dimensions of coping, and surface finishes
- grading items of equipment to suit the skills of beginner, intermediate and extreme riders
- placement of items of equipment to minimise conflict between riders
- access to a phone, first aid, and to the site (for emergency vehicles)
- access to the facility by shared pathway, and away from major roads
- minimising the possibility of loose materials on skating surfaces
- good drainage.

The design brief should require tenderers to demonstrate their understanding of risk management issues for skate park operators. The brief should specifically address security and surveillance issues. Contractors should be aware of the importance of the consultation process and be able to contribute to it (e.g. provide models for display, be available for public meetings, assist councils in the composition of formal communications). Ideally, the design brief should allow for amendments to be made in case modifications are requested in response to issues raised by stakeholders (e.g. community groups, users).

Poor communication, poor design, the use of wrong materials, defective construction, inappropriate placement of the skate park within its environment and a decision to offer the facility as an open or enclosed facility without proper consideration are all potential opportunities for liability. See also Chapter 6: Design.

How important is an effective maintenance program?

The potential for risk will escalate if the facility is poorly maintained. A damaged or dirty skating surface is a potential hazard for users. Even small defects have the potential to cause harm. If councils intend to rely on signs to address potential liability then the design, content and maintenance of these signs is also a critical element in an effective risk management plan. A proper maintenance program needs to be adopted which incorporates:

- planned, regular inspection
- record keeping
- cleaning
- remediation and
- sign-off.

Inspection tips

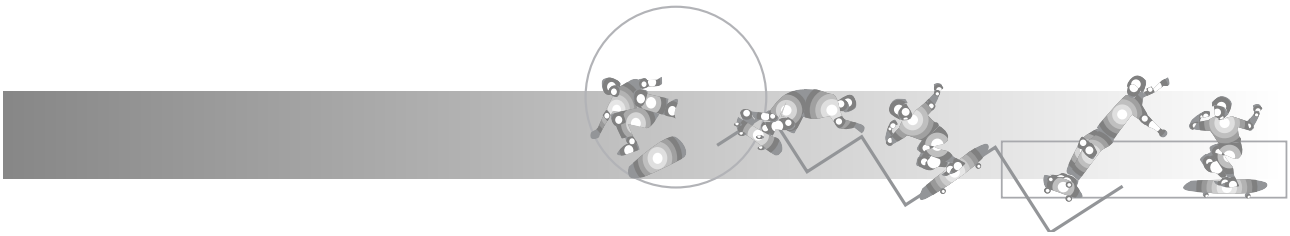
Regular inspections should be carried out to identify and correct any hazards, including, but not limited to, identifying:

- any damage to the equipment or any structures
- the integrity of all surfaces and structures
- cracking or movement of the concrete base or components
- any gaps or trip hazards where the skating surface abuts paving or existing structures
- gaps or raised edges where equipment does not sit flush with the concrete base, or at the transition nose of ramps
- water pooling
- oils or other slippery surfaces
- graffiti or spillages of any type which may interfere with the travel of wheels, trucks or components
- loose materials, debris, leaf litter or dirt on the riding surfaces
- excessive peeling or chipping of concrete, or rusting of metal components or surfaces
- graffiti to be removed.

Maintenance procedures

Maintenance procedures should address, but not be limited to, the following:

- when inspections are to occur, what checklist is to be used and how outcomes are to be recorded and processed
- a contact person to take telephone reports of damage from the public
- how reports of damage are to be recorded and acted upon
- a system for organising routine and emergency maintenance and necessary rectification work
- a process for checking and signing off on the quality and timing of work performed
- how quickly graffiti should be removed, by what means and the specifications of any paint to be used on skating surfaces
- periodic meetings with skaters or their representative body to review works, needs and maintenance procedures
- training of personnel undertaking inspections, preparing hazard reports, and undertaking rectification works



- scheduling of routine maintenance works and cleaning (for times of the year, week and day where minimal use is expected)
- emergency works should be scheduled for as soon as possible and where possible not to coincide with after school or weekend peaks in use.

For enclosed facilities, the preparation of waiver and release forms, medical information forms, and parent release forms is advisable.

Supervision?

Supervision is a vexed question for skate park providers. If the facility is enclosed and always supervised (i.e. one which excludes public access during non-supervised periods) this will substantially reduce some inherent risks, including:

- use at night (when accidents are more likely to happen)
- use during dangerous weather conditions
- use by inappropriate persons (e.g. unfit, affected by drugs or alcohol, in excessive numbers, non — skaters), and
- use by persons not equipped with the necessary protective gear.

However, supervision does impose on councils a number of other requirements, including increased cost, both recurrent and capital, especially if the hours of operation of the facility are sufficient to meet the demands of potential users. Requirements include:

- the need to recruit and train supervisors
- the need to address the conduct of skaters deterred by the supervised nature of the facility
- the need to address the conduct of skaters during periods when access is precluded, and
- the assumption of responsibility for the actions of a supervisor in intervening or not intervening in any given circumstance.

If a council makes a considered decision to opt for an open, unsupervised facility, it significantly reduces the options for managing risk during periods of unsupervised access. The council must then rely almost entirely on good design, maintenance, signage, education and information as its risk management strategy.

Skate parks provided in association with other facilities could be secured through video surveillance — but inform skaters.

Mentors — Establish a mentor program by finding and training experienced, older users of skate parks to act as peer group advisers and role models. This may help monitor and address a range of security and supervision problems.

Signage?

Signs can be useful and are an essential element of a risk management plan. Signs assist councils to demonstrate that they have taken reasonable steps to respond to the foreseeable risks faced by users.

In the landmark High Court of Australia decision on the issue of negligence by a statutory municipal authority it was found that the authority was liable to pay for damages in the case of a young man who became a quadriplegic after diving into the sea off a natural rock platform. The High Court had this to say on signs:

> It is also significant that counsel for the respondent conceded that the [municipal authority] had power to erect signs at the probable point from which the appellant dived … There was no reason why the [municipal authority] could not erect signs on the wave platform warning of the danger which existed immediately beyond the boundaries of the reserve, that being a danger to which swimmers encouraged by the [municipal authority] would be exposed.

However, signs are not the complete answer. For instance, they do not mean councils can delegate or contract out of any potential legal liability. There are other limitations:

- the sign must contain the correct information
- the sign must be constructed to withstand harsh conditions and potential damage
- the sign must be maintained in good condition
- the sign will not absolve councils of liability if the conditions are flagrantly disregarded
- the sign must be expressed in positive, user-friendly language appropriate to all users
- the sign must not exclude relevant users by use of inappropriate terminology.

All communications, not just signage, should encourage skaters themselves to report hazards

What should a sign say?

The content of signs falls into four categories:

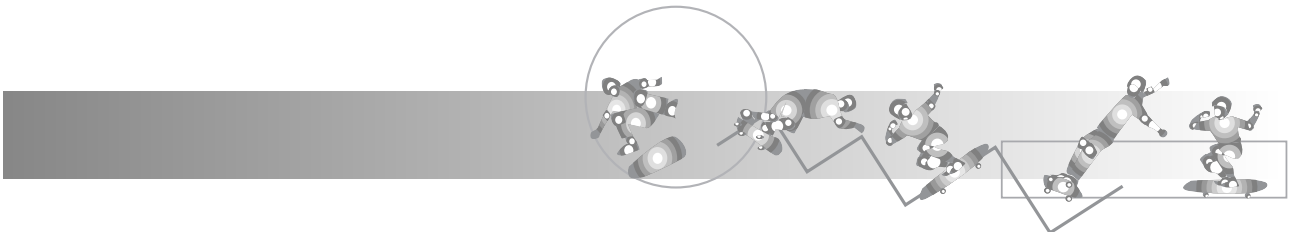
- warnings
- rules (conditions of use)
- prohibitions
- information.

Warnings

- Do not skate if equipment is damaged or skating surface is dirty or obstructed.
- Skating can be dangerous.
- Some items are unsuitable for beginners.

Rules (conditions of use)

- No food or drink is permitted on skating surface.



- No glass is permitted in the vicinity.
- Facility to be used during daylight hours only.
- Skating is at own risk; the user waives any right to claim damages.
- Noise must be kept to minimum.
- Any damage must be reported.
- Restrictions on the number of users.
- Skaters must use areas suitable to their skill level.
- Event organisers shall seek council approval prior to staging activities (permits may be required).

Prohibitions

- No skating without protective gear (a helmet and knee, elbow and wrist pads).
- Do not skate if affected by drugs or alcohol.
- Do not take any other materials (ramps or jumps) onto skating surface.
- Do not use the skate park if a hazardous condition exists (e.g. bad weather, surface damage, obstructions).
- Children under 8 years old must be supervised by an adult.

Information

- Who to contact if the facility's equipment is damaged
- Location (in case of emergency)
- Who to contact in case of emergency, and
- Who to contact for more information.

Most young people enthusiastically soak up new skills and knowledge. Education programs can help to minimise risk, particularly when local skate personalities or elite riders are involved and where there is an atmosphere of mutual respect. The goal of most skaters is to enjoy their sport, increase their skills, and mix with others of similar interest. If that means undertaking programs to learn about safety, they will.

Inappropriate users?

In any public place there may be unwelcome people. The expression "inappropriate users" is used to describe persons who, for one reason or another, represent an unacceptable risk to councils, sections of the public, other users and themselves. They may include any of the following:

- extreme risk-takers
- violent or destructive persons
- users not wearing protective gear (see below)
- users affected by alcohol or drugs, and

- users who do not have the ability or skills to use equipment or areas of the skate park.

The *Equal Opportunity Act* 1995 (Vic) specifically permits discrimination against another person on the basis of impairment, physical features or pregnancy, if the discrimination is reasonably necessary to protect the health or safety of any person (including the person discriminated against) or of the public generally.

Therefore, the legal impediment preventing councils from adopting appropriate measures to exclude inappropriate users has been removed by statute. The converse is that councils, in discharging their duty of care, will not be excused from addressing the hazards posed by inappropriate users.

The question of how councils might address this risk is more difficult to answer. Clearly, supervision within a closed environment is one solution. For open venues councils can rely on:

- design and siting of skate parks to minimise use by inappropriate users
- zoning of areas to suit different skill levels
- effective signage
- random inspection and surveillance of facilities
- a response program to community complaints
- user and community consultation and collaboration
- education programs targeted to users and potential users
- peer group mentor schemes.

Protective gear (as a minimum) means ...

Bikes

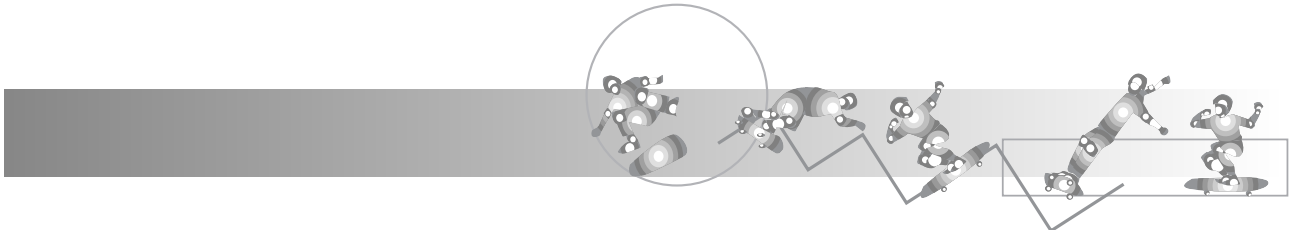
- Helmet (full — face for vert and trails)
- Knee pads
- Elbow pads
- Gloves

Boards

- Helmet
- Knee pads
- Elbow pads

Blades

- Helmet
- Wrist guards
- Knee pads
- Elbow pads



What if something goes wrong?

The extent of a council's duty to users is difficult to pin down. The law always has the benefit of hindsight — but councils will be judged by steps taken in anticipation of the event.

The importance of communication

Effective communication must be a core element in the development of the entire program leading to the construction of a skate facility. It is an essential part of the risk management program and will form a material element in addressing any culpability should things go wrong.

Stage 1: The decision to proceed

The decision by a council to construct a skate facility needs to be one which will survive scrutiny by a court if something does go wrong. There should be broad — based community consultation and consideration of divergent views.

Decisions should not be influenced by a particular group with a particular set of views (e.g. a section of the community wishing to remove skaters from shopping precincts and similar public areas) because this may lead to poor decision — making in terms of design, construction and management. If the decision is to proceed to construct a skate park, councils may need to demonstrate that they addressed the legitimate concerns of their opponents.

A court will not grant relief from liability on the basis only that the facility (found to be deficient in a particular respect) was to be regarded as a temporary facility designed to address an urgent social problem elsewhere.

Stage 2: Design and construction

The selection of suitably qualified planners, designers, engineers, landscape architects and construction companies is essential. Experienced professionals will be responding to a specific brief, hence the need to incorporate a risk management plan and adequate input from skaters and the community. The involvement of a professional or experienced skater in the design and construction phases is also essential. Design professionals should be briefed to comment on input made by potential users and the community.

Councils should consider holding clinics and demonstrations (demos) before a facility is officially opened. This also provides an opportunity for the principles of first aid to be explained by a certified instructor.

Stage 3: Completion and commissioning

The completion of construction and commissioning will require all the usual sign-offs, including risk management. The commissioning stage is a particularly useful one for the dissemination of information about areas designated for different skill levels and rules applying to the skate park, and the reasons for them, because interest among potential users will be heightened during this period. The skate park opening can also provide opportunities to communicate important information to a broader audience.

Stage 4: Operation of the skate park

Once the park is opened, any specific risk issues should be addressed by:

- an inspection, maintenance and cleaning program
- approved procedures for risk identification, evaluation, control and monitoring
- the provision of a contact number for the council
- rectification and repairs undertaken as the result of maintenance inspections
- information communicated to the council via the provision of the contact number on signage, and
- management of any specific problems relating to the particular facility.

Adequate resources must also be allocated to enable councils to respond to community feedback.

The solution to operational difficulties may be assisted by a continuing communication program, including:

- specific formal communications by councils to ratepayers and skaters
- articles in local newspapers
- information provided to schools, clubs and associations.

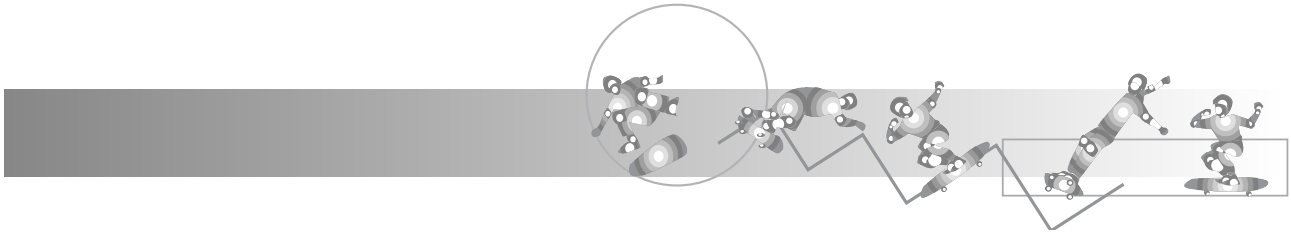
Councils might find it useful to contact other community — based communication programs such as the Safety House and Neighbourhood Watch programs.

A risk management plan

Most public and private sector organisations undertake risk management assessment as part of their ongoing corporate governance disciplines. Standards Australia and Standards New Zealand have published a revised joint standard on *Risk Management* [AS/NZS 4360:1999]. They have also published principles for the development of a risk management program in the public sector, *Guidelines for Managing Risk in the Australian and New Zealand Public Sector* [AS/NZS HB 143:1999]. **[46]** They suggest two overarching criteria for the determination of risks:

- the significance of the risk
- the likelihood of it occurring.

This chapter on safety and risk has been constructed to introduce the essential elements of a risk management strategy. Ultimately, a skate facility should not be commissioned unless and until a risk management plan is in place.



Risk management strategy checklist

Planning and design

- ☐ Design brief includes a risk analysis and plan.
- ☐ Appropriate designer and contractor have been selected.
- ☐ Risk management sign-off in the construction process.
- ☐ A positive strategic decision has been made on whether to provide supervision or not. (The resolution is integral to the strategic decision on whether the skate park will be an open or an enclosed one.)
- ☐ The facility design brief covers surveillance and security.
- ☐ Design brief requires professionals to comment on, and actively participate in, community consultation.
- ☐ Design brief allows amendments to be made to accommodate any necessary modifications arising from community consultation.
- ☐ Maintenance plan documented.
- ☐ A sufficient appropriation for maintenance has been made as part of the budget process.
- ☐ Schedule of maintenance inspections documented.
- ☐ Schedule developed and documented to carry out cleaning and remediation regularly and promptly.
- ☐ Documentation regime established for recording cleaning, maintenance and remediation.
- ☐ Skills audit and training schedule established for supervisors (whether employees, contractors or community partners, including those who undertake inspections and maintenance and repair work).
- ☐ Access for emergency vehicles provided.
- ☐ Site is in a prominent place with good public surveillance.
- ☐ Site is adjacent to another facility (where telephone, first aid equipment and trained staff are available).

Signage

- ☐ Signage prepared prior to park being skateable.
- ☐ Signs constructed to withstand harsh conditions.
- ☐ Signs to be regularly inspected and maintained.
- ☐ Signs designed with anti — graffiti measures (e.g. height, protective surface coatings and no vinyl lettering).
- ☐ Signs provide emergency medical contact details.
- ☐ Signs provide contact details (including after hours) for the council.
- ☐ Schedule in place to inspect and maintain signs.
- ☐ Strategies in place to take additional action when signs are persistently ignored.
- ☐ Agreed process in place to exclude inappropriate users at supervised facilities (signage and ticketing).
- ☐ Resources allocated to respond to community feedback.

Communication

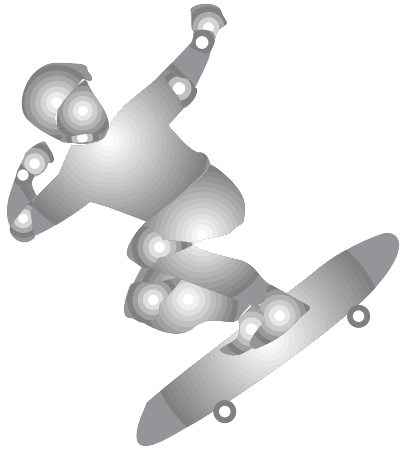
- ☐ Agreed consultation process with key stakeholders (e.g. users, user groups, community groups, neighbours) in planning, design and construction phases.
- ☐ Suitable information prepared for use in council publications, local media and other outlets.
- ☐ Strategy in place to regularly target primary and secondary schools with information, (e.g. the rules and the reasons for them) and specific education programs.
- ☐ Process for regular communication with users, the community, clubs and associations.
- ☐ Education programs designed and organised for existing and potential users.
- ☐ Mentor program established using older participants.

8. What skaters can do

- Developing a skate park
- The 10 steps
- Reducing the risk of injury

Help develop a skate facility

Skaters can become actively involved in the planning of facilities and make a difference to the outcome, including whether a skate park gets developed, how quickly and the type of facility ultimately built. Generally the process includes the following stages:



- Establishing need
- Council resolution
- Community consultation
- Choosing a location and site
- Planning and design
- Development approval processes
- Financing
- Design documentation
- Tendering
- Construction
- Management and maintenance

However, before you start ... be prepared

- Sometimes planning processes can be slow, especially if a council does not own a proposed site. Council meetings, for example, usually only occur monthly. Statutory planning processes may determine time frames. For instance, applications for planning permits have to be advertised for a minimum of 14 days, objectors are usually given 21 days to lodge an appeal with the council, it may take some time for appeals to be heard, and applicants then may have 60 days to appeal.
- "No" may not always mean "no", it may mean "not yet" or "not there".
- Who you know and who you involve, may make all the difference.
- Local elected members of parliament are there to represent youth — even if you are too young to vote.
- Most councils have small grant schemes that community groups can apply for, and there are state and federal grant programs as well. Each will have specific conditions attached to them that must be met. (For example, to be eligible you may need to be an incorporated organisation and be able to match funds dollar for dollar.)
- Effort creates results. People are more likely to assist when they can see the effort you are putting in, and that you are helping yourselves. The more money you raise, the more money is likely to be offered from community, corporate or government sources.

Your local council is the most likely organisation to help get a skate park off the ground. Councils can provide land, and perhaps access to funds (although not necessarily fund the project directly or entirely). There are a number of steps that are commonly taken before a council starts to build a skate park.

Establishing that there is a need

The council may require some research to quantify the need for skate facilities. It may also involve a plan to guide what action the council should take and a review of issues such as funds available, safety and insurance, the distribution of skate facilities, and preparation of a management plan. The council may engage the services of a consultant to carry out this planning work — and it may take some time.

Council resolution

Before anything is built, a council will need to formally adopt a plan and make resolutions about supporting, financing, developing and locating a skate park.

Community consultation

Community consultation is an essential component of council processes. It may start early, occur throughout the whole process or take place later. The process can be lengthy if it is evident that there are groups with opposing views and disputed matters need to be researched and negotiated.

Choosing a location and site

If no central piece of land is available, it may prove to be a difficult process. A number of criteria will be applied to ensure a site is suitable. Then, later, there will be the process of getting any necessary development approvals for the chosen site.

Planning and design of the site

This may include the preparation of a master plan for the site, a landscape design and a design for proposed skate park elements. Consultants may be used to undertake this work in conjunction with skaters, and council may require extensive community consultation at this stage.

Development approvals

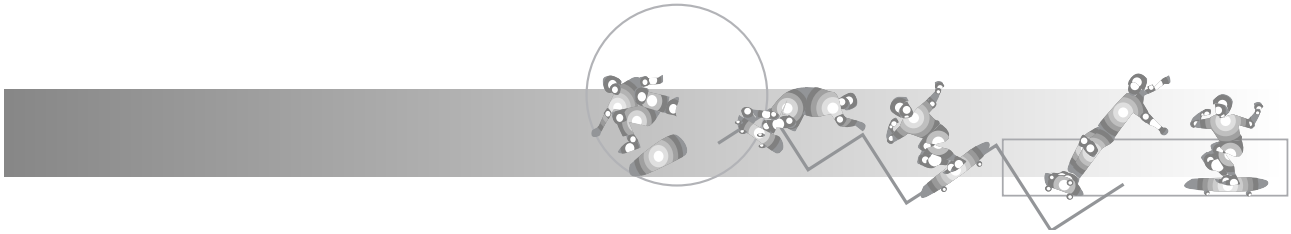
This may include applying for a planning permit, or obtaining approvals from other responsible authorities, such as the Crown if the preferred site is Crown land, or Melbourne Water if it is a drainage reserve etc. During this process there may be a period when the development is advertised and objections are called for. If there are objections, there may be hearings, appeals and lengthy delays.

Financing the development

Fundraising, including applying for grant moneys, and getting approval for a budget to finance the park and its ongoing operation, are necessary steps in building a skate park.

Detailed design documentation

This stage may include surveying the site, including taking soil samples for testing. Design drawings will be prepared for construction of the skate park's equipment and landscape works, prior to the purchase of any off-the-shelf items (bins, seats etc). The original design concept may need to be modified at this stage to suit site conditions and available funds.



Tendering the works and selecting contractors

Generally a council will advertise and seek tenders to construct the skate park, or seek three quotes for works — unless the skate park is to be built by residents or a community group.

Construction

Supervision of contractors and volunteers will be necessary as will liaison over the post-construction maintenance period when any minor problems are fixed.

Management and ongoing maintenance

Before a skate park is built, a process of deciding how it is to be managed and maintained should occur. Skaters can make an important contribution at this stage.

The 10 steps

Here are ten steps that skaters can take to help get a skate park off the ground.

1. Do your homework
2. Find your friends
3. Negotiate, negotiate
4. Write it all down
5. Spread the news
6. Lobby decision — makers
7. Don't give up! Review and re — energise
8. How will you manage?
9. What's next?
10. Celebrate!

1. Do your homework

The first step is to speak to the recreation officer at your local council to find out whether they have a recreation plan and whether it includes a skate park. If it does, offer to help in any way you can to get the park constructed as quickly as possible.

But you may find that the council has an agreed set of priorities for funding recreation facilities over the next couple of years. If that is the case, follow these steps.

- Find out how many skaters there are in your area to justify building the park. You may need to do your own survey (See Chapter 2: The Market and Chapter 3: Encouraging Skaters).
- Find out what grant programs are available and their objectives and conditions. If the timing of grants is all wrong and the priorities have been set for the next financial year, you may need to find other private sources of money first, or you may need to have the priorities changed!
- You should also talk to other skate parks about good ideas, fundraising, sources of funding, important contacts and what makes a good skate park work.

- Be prepared to answer all the standard criticisms that people can raise about skate parks. Quash these misconceptions with facts and figures from other skate parks.
- Get contacts for all relevant community organisations that may help. Important people to contact quickly include the Skateboarding Association of Victoria, any local skate and BMX shops and your local police.
- Talk to your local councillor about how they can help and about the process of working with council.

2. Find your friends

You will need someone who can write letters (and preferably supply paper, if not photocopying and stamps as well), plus someone who has been on a committee before (to organise meetings and keep records), and someone with a bit of a profile in your area (for help with publicity).

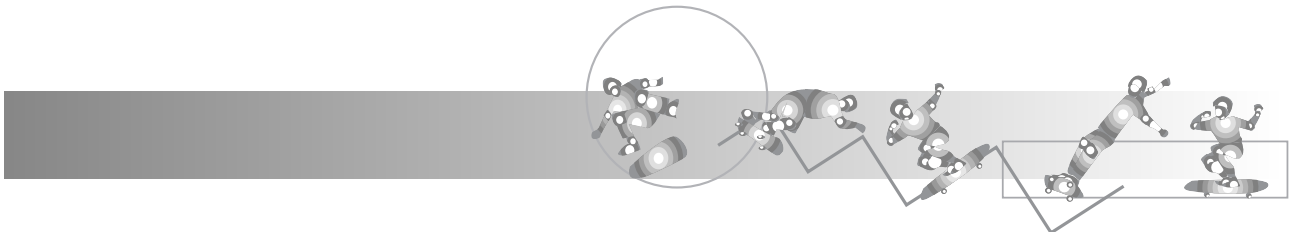
- Start a register of skaters who are interested in a skate park. You might use this as a mailing list, and to show the level of support the project has.
- Enlist some key people to help, especially if they have good standing in business or in the community.
- Ask the local council to help organise a public meeting.
- Write to all the skaters on the register, and all organisations you can think of, to ask for assistance. (Include local state and federal politicians, local councillors, service clubs, your local YMCA, sports clubs, sports stars, local skate personalities, professional skaters, your local police, the local skate or sports shop, local youth groups, local bands, and the biggest corporations in town.) Also, invite them to attend the public meeting.
- At the meeting, form a skate park committee.

3. Negotiate, negotiate

- Don't lose your cool when you come across people who don't support a skate park or don't like young people. Listen to what they say.
- Provide critics with sensible, responsible arguments for giving local kids a go, and the facts from other skate parks.
- Talk to residents who are worried about having a skate park near them and negotiate draft rules about whatever they imagine will be bad about a park (noise, rubbish, graffiti etc).
- Negotiate a partnership with other sporting clubs and use their contacts — they might get more young members and maybe you would get access to things like toilets (at certain times).

4. Write it all down

- Presentation is the key to success. Prepare information about skating and why it is important to you and your friends. Talk about the history and culture of skateboarding to people who haven't been involved. (See Chapter 1: History and Chapter 2: The Market).
- Have facts and figures on hand (a single sheet is ideal) to give to people so they can go away and argue the case on your behalf.
- Keep records of meetings: an outline of what happened, who expressed what views, and especially what you decided to do and who would do it.
- Keep records of conversations with important people, especially the date they occurred. Compile a diary of your progress.



- There are crucial bits of information that you need to find, and keep in the one spot, including:
  - the names, addresses and phone numbers of important contacts and potential funding bodies (e.g. Sport and Recreation Victoria, Department of Justice, your local council, local service clubs, health promotion bodies, road safety bodies, youth foundations) and their funding timetable (sometimes only once or twice a year) and any other potential sponsors and supporters
  - when council meetings are held
  - when the council budget is decided, and by whom.
- When you are organised, ask the manager of your council's recreation or youth services area and your local councillor for a time to present all the information to them or to an appropriate council committee.

5. Spread the news

Keep as many people as possible informed of your progress. The best way is through local newspapers, but you will have to offer 'newsy' stories or a good photo opportunity.

Find skating equipment or a portable ramp (from a promoter, local skate shop or local council) and organise a learn-to-skate day or a blade to the beach or concert with local bands. Invite celebrities to open the event. Get local skate pros and personalities to do demos. Telephone local radio stations and newspapers (follow up with a letter confirming details) well in advance of the event. Or you could:

- offer to provide regular information about skate competitions or events, or other skate parks (for the sporting section of the paper)
- write a letter to the editor on what you are doing, how it benefits the whole community, and how people can help. (Protests, complaint letters and confrontations are generally less successful than positive action.)

6. Lobby decision-makers

- Members of parliament can be found at www.parliament.vic.gov.au at and www.fed.gov.au.
- Make appointments to see your local members and other influential people. Nominate a few key people (three people max) to attend. This might include, say, a high-profile (preferably local) businessperson, and a well spoken and seasoned skater, or youth advocate. **Note:** First impressions are lasting! Send some key information about your proposal and any supporting information beforehand.
- Expect to be given 20 to 30 minutes, so be prepared to spend 10 minutes explaining your case, 10 minutes listening (their advice is important) and 10 minutes discussing the next best steps to take.
- Write a letter thanking them for their time and confirming the main things that were said (and keep a copy).
- If the initial responses are not overly positive — seek private funding and support and come back. Support breeds support, and many community grant schemes offer funds only if they are matched.

7. Don't give up! Review, re-energise

Sometimes the process may be slow. There may be other priorities; there may be due processes that need to be followed for things like community consultation or development approvals.

- Sit down and realistically review how far you have come. Remember where you started.

- But where to now? Consider getting some new help, create new contacts, and make new partnerships. Renew old contacts, double-check on processes, and ask council what else you can do.
- Don't lose sight of your goal!

8. How will you manage?

If everything's going to plan, some major decisions will have been made about the size, location and layout of your skate park. It's now important to look past the construction phase and work out how to manage the park.

- Consider: supervision, events, clinics, fundraising, risk management, park policy, cleaning, resident involvement, working bees and ongoing development.
- Talk to the decision-makers about being involved in all the important management decisions.

9. What's next?

When the park opens there is still work for skaters to do, especially in keeping your park clean and safe!

- Don't give anyone a reason to badmouth your park. Do not tolerate vandalism or graffiti — deal with it immediately.
- If people are blowing it, use the power of the people who got the park — i.e. you and your friends — to stop it.

  AND … don't waste all the effort you've put into getting your skate park. Share your knowledge with others.
- Set up a website, write an article for a skate magazine, write the book!
- Become a mentor to other young sportsmen and women (not necessarily skaters) because the process is the same. Remember how much help you got?

10. Celebrate!

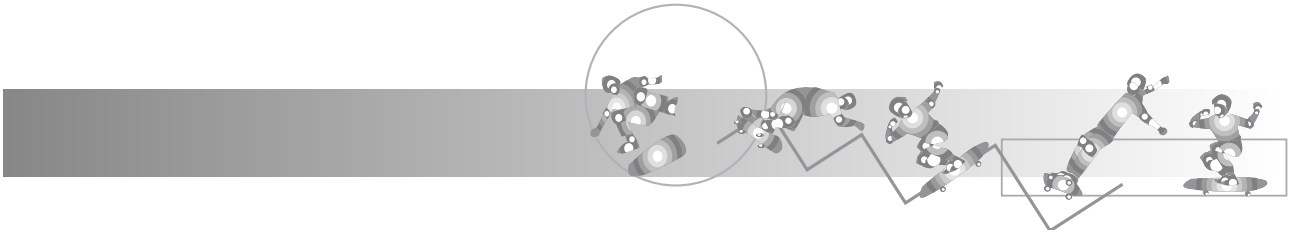
The opening of your skate park should be a celebration for everyone — not just the decision — makers. It's an opportunity to promote skating and encourage lots of people to visit.

- Make sure everyone who was involved, at whatever level, is thanked and acknowledged.
- Turn the celebration into an annual event!

Reducing the risk of injury

There are many things that skaters can do to contribute to getting a skate park up and running, and providing safer, more appropriate facilities, managed to meet their needs. Some suggestions on these inputs are listed below. In particular, skaters can play a significant role in reducing the likelihood of injuries.

The International In-line Skating Association advocates that skaters should skate: SMART, LEGAL, ALERT, POLITE. **[47]** The following is an adaptation of their guidelines. It also incorporates recommendations about injury prevention made by Monash University Accident Research Centre.



Skate smart

- Comply with any skater code of conduct and learn the new road rules.
- Have in place a conditioning and fitness program.
- Warm up and do a pre — skate stretch.
- Cool down and do a post skate stretch.
- Wear good quality, well — fitting helmet, protective gear and shoes that provide adequate ankle support.
- Long — sleeved shirts and long trousers will give additional protection from scrapes and cuts.
- Wear bright or reflective clothing if riding at night.
- Check your skates regularly to make sure they're in good condition.
- Rotate your wheels when they wear unevenly.
- Replace worn out wheels and bearings.
- In — liners: replace your brake BEFORE it wears out.
- Make sure your wheels are securely tightened, and are kept clean.
- Carry an all — purpose skate tool with you when you skate.
- Avoid skating at night: when you're tired, when people can't see you, and when you can't see hazards.
- When you can't avoid falling, try to fall onto sand or grass, and fall forward onto your wrist guards and kneepads.
- Master the basics before riding in busy areas, with others or trying tricks:
  - falling safely
  - stopping (for in — line: striding, stopping, and turning)
  - for BMXers, bailing out so the bike doesn't land on top of you.
- For those who skated in childhood and are returning to the sport: obtain a good level of fitness, and practice before trying tricks.
- Identify areas and equipment to skate that match your skill level. Some parks identify the areas and equipment suitable for beginners, intermediate and advanced (extreme) skaters.

On paths and in the street …

- Be aware that it is DANGEROUS to skate in the street.
- If you skate for transport, use bicycle lanes and footpaths where they are provided — because compared to road traffic the speed of other path users is more compatible with skaters.
- If you must skate in the street at night clip two flashing bicycle lights on: one to your helmet or your waist, one at the front and one at the back.
- Don't skate with headphones. They block out the sounds that can alert you to approaching danger.

Skate legal

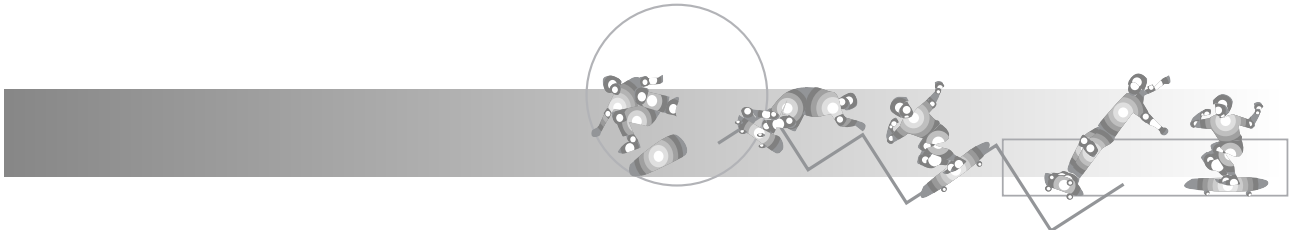
- Find out if there are local laws prohibiting skating in areas of your city.
- Learn and obey all local road rules, local laws and codes of conduct.
- Give way to pedestrians.
- On the road — consider yourself to be subject to the same obligations as a cyclist or a driver of a car.
- Consider insuring yourself against injury or against injuring someone else.
- Read the signs at skate parks and on paths and abide by conditions shown.

Skate alert

- Check the riding surface for debris, spillages and hazards before skating.
- Procure a broom and sweep any debris off the area before skating.
- Ensure damage and hazards are reported.
- Keep speed in check.
- Skate under control at all times.

  On paths and in the street …

- Scan for people opening car doors in front of you, as you would on a bike.
- In — liners: avoid swinging your arms wildly, especially when skating on busy paths or in areas shared with cyclists or pedestrians.
- Watch out when approaching driveways.
- Watch out for hazards on the road: pot holes, culverts, roadworks and bridges with gaps between panels and timber.
- Avoid water, oil, and sand.
- Avoid mixing with traffic.



Skate polite

- Learn how to turn, control your speed, and, most important, to stop before mixing with other skaters and path users.
- Don't try and learn in high-use areas, or on equipment designed for highly skilled skaters (that is like doing breast stroke in the fast lane at the pool).

On paths and in the street …

- Skate on the left and pass on the right.
- Don't hog the whole path.
- Announce your intentions to other skaters, pedestrians or cyclists.
- Always give way to pedestrians. **[48]**

Skaters' checklist

How to develop a skate facility

- ☐ Be prepared
- ☐ Establish there is a need
- ☐ Council resolution
- ☐ Community consultation
- ☐ Choosing a location and site
- ☐ Planning and design of the site
- ☐ Development approvals
- ☐ Financing the development
- ☐ Detailed design documentation
- ☐ Tendering the works and selecting contractors
- ☐ Construction
- ☐ Management and ongoing maintenance

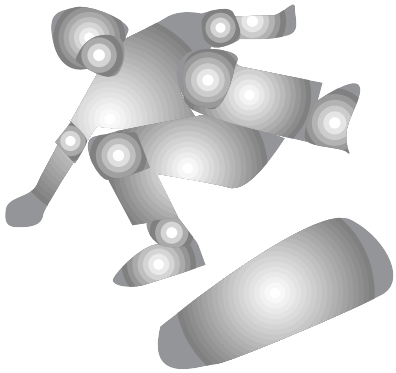
The 10 Steps

- ☐ Do your homework
- ☐ Find your friends
- ☐ Negotiate, negotiate
- ☐ Write it all down
- ☐ Spread the news
- ☐ Lobby decision-makers
- ☐ Don't give up! Review and re-energise
- ☐ How will you manage?
- ☐ What's next?
- ☐ Celebrate!

Reduce the risk of injury

- ☐ Skate smart
- ☐ Skate legal
- ☐ Skate alert
- ☐ Skate polite

9. Checklists



This chapter contains master copies of the checklists appearing throughout the manual.

Location and siting checklist

Key chapters: 4, 5 and 6

Location

- ☐ Existing and projected age of the population is largest for 10–19 year olds (or 8–24 year olds).
- ☐ Located where young people want to be, or adjacent to where they congregate.
- ☐ Where a major community hub or central area with undeveloped land (either council-owned or Crown land) is available, is being recycled, or has low value for other users (e.g. under freeway fly- overs).
- ☐ Easy access to public transport (preferably train — especially if BMX provision is planned).
- ☐ The catchment (regional or local) matches the proposed facility.
- ☐ Co-location or partnerships with existing shopping centres, sport or recreation facilities, or interested schools may be possible.

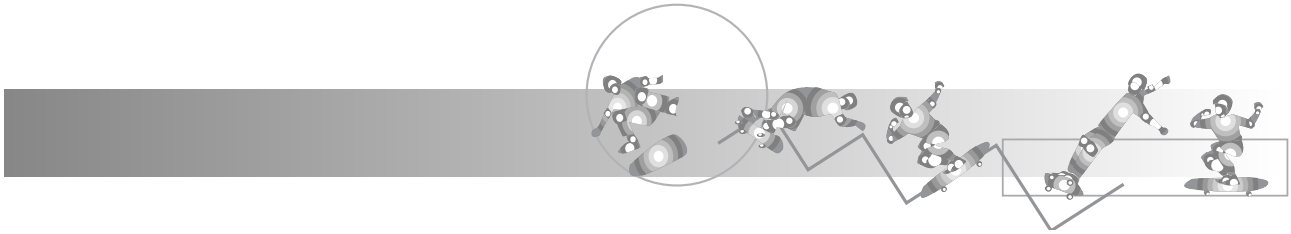
Siting

- ☐ Suitable planning scheme zone.
- ☐ Suitably sized (allow for expansion, and space for parking if a district or regional skate park).
- ☐ Suitable soil, slope and environmental conditions.
- ☐ Emergency vehicle access (fire and ambulance).
- ☐ Visually prominent, pleasant site with good public surveillance for safety and high marketability (e.g. for obtaining sponsorship).
- ☐ Associated amenities, such as a telephone, toilets, water, shelter and shade are available or cost-effective to provide.
- ☐ Adequate distance from residential dwellings and incompatible land uses (i.e. avoiding noise and light intrusions).
- ☐ Where there will be minimal conflict with other users (e.g. pedestrians) or other sports (e.g. netball).
- ☐ Suitable to fence if required (e.g. where a skate bowl is sited).
- ☐ Served by an off-road shared bicycle path network or route.
- ☐ Not too close to a busy road.
- ☐ Restricted access to vehicles to prevent skating at night by car lights.
- ☐ Free access to users and spectators.
- ☐ Close to shops selling food and drink.
- ☐ On a local circulation route.

Supervised facility checklist

Key chapters: 6 and 7

- ☐ All staff hold current first aid and CPR qualifications, have appropriate job descriptions and can demonstrate (or receive) appropriate training.
- ☐ Hours of operation suit potential users and are not limited because of cost.
- ☐ Skaters are required to sign registration and waiver forms before participating. If participants are under 18 years of age, parents or legal guardians are required to indemnify the council for any damages suffered by participants. **[31]**



Skate park planning checklist

Key chapters: 3, 5, 6 and 7

POPULATION TRENDS

- ☐ Population trends established, especially for the 10–19 age group, for each suburb in the municipality.
- ☐ The number of people likely to board, blade or BMX, estimated by area, and therefore in what areas skate participation is likely to be sustainable.

LOCAL ISSUES

- ☐ Local skate personalities — boards, blades and BMX — and from professional to beginner involved (to determine trends, key issues, attitudes and preferences likely to impact on facility provision, and to participate in the planning, provision and management of facilities, as well as the sport's development).

SKATING PROVISION

- ☐ Figures on skate participation and provision have been compared to other local sport and recreation activities.

ENCOURAGING SKATING

- ☐ Strategies identified to improve skating opportunities (e.g. programs, events, clinics).
- ☐ Street safety improved (e.g. wide paths, skate symbols on paths, skate lanes, regular cleaning).
- ☐ Skaters' needs are taken into account in broader planning and design decisions.

FACILITY OBJECTIVES AND STRATEGY

- ☐ Key target users identified.
- ☐ Objectives of providing a facility documented (i.e. who, what, when, how, and is a facility going to solve the problem?).
- ☐ Roles determined (i.e. are you a provider or facilitator or both, do you commonly get involved in program and service delivery and management of facilities?).
- ☐ A strategic position in relation to long-term skate facility provision agreed.

TYPE AND NUMBER OF FACILITIES

- ☐ Decision taken on number and type of facilities to be provided in the long term.
- ☐ Mix of facilities (indoor, outdoor, permanent, temporary, skateboard, blades, BMX) considered and decided.
- ☐ Issues for each of the user groups (i.e. board, blades and BMX) considered.

MANAGING THE DEVELOPMENT PROCESS

- ☐ Decision on supervised or non-supervised facility taken and nature and extent of supervision documented.
- ☐ Opportunities to combine management contracts assessed.
- ☐ Opportunities for skater, resident and other input assessed.
- ☐ Distribution, location and siting
- ☐ A hierarchy of facilities determined (e.g. regional, district or local).
- ☐ Localities where there is likely to be the greatest sustained demand identified.

Distribution, location and siting

- ☐ Budgeting
- ☐ Communication
- ☐ The distribution of skate opportunities agreed.
- ☐ Criteria for location and siting agreed.
- ☐ Opportunities for co-location and partnerships identified.
- ☐ Ownership, zoning, registration, policies and plans for the preferred site checked.
- ☐ Planning approval, referrals and consultation processes followed.
- ☐ Realistic time line developed.
- ☐ Central node sites identified (i.e. where young people currently gather or currently pass).

Pricing and cost planning

- ☐ Cost plan devised.
- ☐ Budget issues (how much can you afford?) resolved.
- ☐ Staging and opportunities to raise funds and income reviewed.
- ☐ Decision whether or not to charge entry fees finalised.
- ☐ Costs allocated for facility's entire product lifecycle (e.g. planning, design, construction, management, maintenance, evaluation, upgrade and retrofit).
- ☐ Marketing, cleaning, programming, consultation and communication budgeted for.

Communication

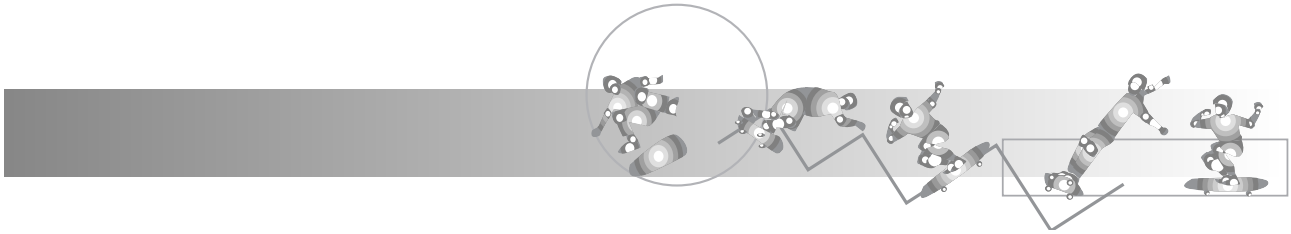
- ☐ Communication strategy developed including provision to communicate with the general public, skaters, key stakeholders (from inception of project to end of its useful life).

design development

- ☐ Sufficient land area reserved to accommodate the range of users, diversity of elements, future growth, associated amenities, signage and car parking etc.
- ☐ Key stakeholders, including experienced boarders and bladers, BMXers involved in design development.
- ☐ Creativity encouraged rather than standard elements.
- ☐ Core elements determined (e.g. mini or vert ramp, street style obstacles, bowl, or a combination of these).
- ☐ Landscaping elements and amenities included in design (e.g. shade, paths, edge treatments, toilets, drinking water).
- ☐ Needs of different skill levels addressed.
- ☐ Opportunities to integrate existing ramps reviewed.
- ☐ Critical specifications for equipment, surfaces and transitions checked.
- ☐ Risk management plan prepared.

materials

- ☐ Critical specifications for equipment, surface finishes and materials checked.
- ☐ Decision on use of pre-cast, prefabricated components or construction in situ.
- ☐ Suitable materials chosen — to meet budget, local conditions, design and construction requirements.



Layout

- ☐ Siting, layout issues in the broader park area agreed.
- ☐ Distances to fences and structures reviewed. Fall zones considered.
- ☐ Adjacent materials considered (i.e. no loose materials).
- ☐ Distance between items enhances flow and minimises conflict.
- ☐ Areas designated for different skill levels.
- ☐ Shade and lighting suitability reviewed.
- ☐ Noise considered (distances, materials, enclosure, rigidly, acoustic treatments).

Signage

- ☐ Warnings, information, rules, etc reviewed.
- ☐ Design, materials, construction and position agreed.
- ☐ Signs installed before park is opened.

Construction

- ☐ Experienced skaters on selection panel.
- ☐ Contractor with experience in skate parks and good reputation chosen.
- ☐ Adequate supervision of works.
- ☐ Risk management (construction) signed off.

Managing the park

- ☐ Education programs, clinics, demonstrations organised before opening.
- ☐ Management and development plan prepared.
- ☐ Opportunities for ongoing skater and community input.
- ☐ Responsibility for conduct of programs and events considered and agreed.
- ☐ Communication program about the park introduced.
- ☐ Risk management plan implemented.

Procedures

- ☐ Procedures, including risk identification, evaluation, control and rectification introduced.
- ☐ Regular cleaning and maintenance program introduced.
- ☐ Codes of conduct introduced with skaters.
- ☐ Strategies to enforce codes of conduct agreed.

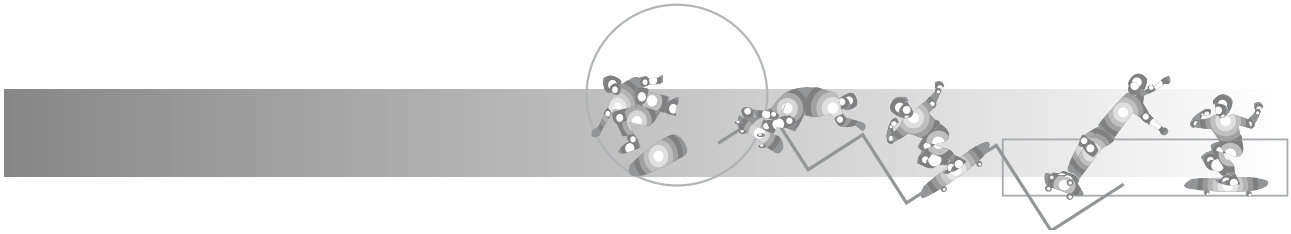
Park development

- ☐ Means of measuring usage established.
- ☐ Ongoing program of evaluation and development planned.

Skate park design checklist

Key chapters: 4, 5 and 6

- ☐ All structures have been designed in accordance with the critical dimensions provided.
- ☐ All structures have been designed in conjunction with professional skaters and design professionals.
- ☐ Drawings and specifications have been scrutinised by an experienced skater prior to construction to meet minimum tolerances.
- ☐ Skaters are involved in assessing tenders and supervising construction.
- ☐ Arrangements have been made to ensure the standard of construction is extremely high, that all gradients and angles are in accordance with the specifications, and all skating surfaces are smooth.
- ☐ Ramps have been tested by an appropriately qualified professional and a professional or highly experienced skater for degree of difficulty.
- ☐ Facilities are designed to cater for a range of proficiencies.
- ☐ Structures are graded for different levels of proficiency and separated in the design.
- ☐ Access to the facility by shared pathway is provided and is away from major roads.
- ☐ Walkways are located at a safe distance from skaters, for safe and easy access.
- ☐ Cross movement between street elements and potential for conflict between users has been minimised.
- ☐ Barriers are attached to appropriate structures on the edge of the site to minimise users entering and colliding with riders using equipment.
- ☐ Equipment is positioned away from floodways and major roads or provided with safe crossing areas.
- ☐ Facilities have provision for adequate drainage.
- ☐ Surfaces are a sufficient distance from loose materials to prevent them moving onto the skating surface.
- ☐ Higher structures are sited on the edge of the area so falls are less likely to result in collisions with other users or other equipment. Grass verges may also provide better cushioning than concrete.
- ☐ Easy access to a phone and first aid, and to the site — for emergency vehicles — is provided.
- ☐ Indoor facilities are equipped with adequate lighting, panic hardware, and properly marked exits.
- ☐ Park and equipment positioned with north-south orientation so riders can see coping, edges, and other riders.
- ☐ Any flammable coatings or foam used on the undersurface of ramps to dampen noise are enclosed (to prevent ignition).
- ☐ Narrow areas between the skate park edge and existing structures are paved to minimise hazards, reduce maintenance and limit the presence of loose materials.
- ☐ Shade structures or trees are sited in the vicinity but at a suitable distance to minimise interference with riders and reduce possibility of leaf litter, bark and fruits falling on the surface.



Signage checklist

Key chapters: 4, 5 and 6

- ☐ Signs will be installed before the facility can be used.
- ☐ Skaters are involved in the design, wording (and possibly the making) of the signs, for maximum impact.
- ☐ A sign is placed on the side of the facility most likely to be entered first, and not within the fall zone of any item of equipment.
- ☐ Wording is checked for legal and insurance implications.

Risk management strategy checklist

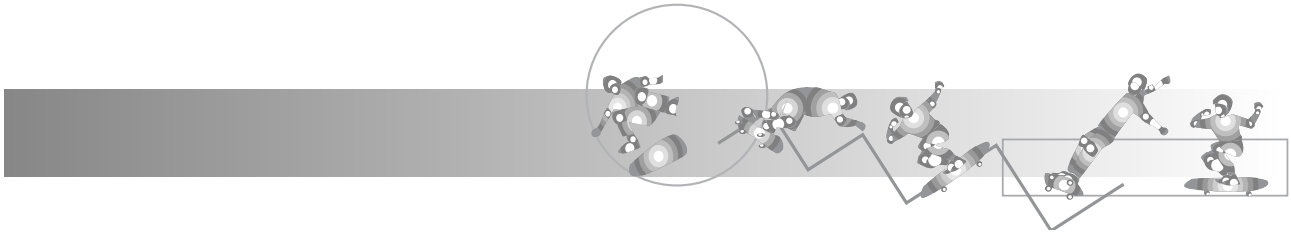
Key chapters: 6, 7 and 8

Planning and design

- ☐ Design brief includes a risk analysis and plan.
- ☐ Appropriate designer and contractor have been selected.
- ☐ Risk management sign-off in the construction process.
- ☐ A positive strategic decision has been made on whether to provide supervision or not. (The resolution is integral to the strategic decision on whether the skate park will be an open or an enclosed one.)
- ☐ The facility design brief covers surveillance and security.
- ☐ Design brief requires professionals to comment on, and actively participate in, community consultation.
- ☐ Design brief allows amendments to be made to accommodate any necessary modifications arising from community consultation.
- ☐ Maintenance plan documented.
- ☐ A sufficient appropriation for maintenance has been made as part of the budget process.
- ☐ Schedule of maintenance inspections documented.
- ☐ Schedule developed and documented to carry out cleaning and remediation regularly and promptly.
- ☐ Documentation regime established for recording cleaning, maintenance and remediation.
- ☐ Skills audit and training schedule established for supervisors (whether employees, contractors or community partners, including those who undertake inspections and maintenance and repair work).
- ☐ Access for emergency vehicles provided.
- ☐ Site is in a prominent place with good public surveillance.
- ☐ Site is adjacent to another facility (where telephone, first aid equipment and trained staff are available).

Signage

- ☐ Signage prepared prior to park being skateable.
- ☐ Signs constructed to withstand harsh conditions.
- ☐ Signs to be regularly inspected and maintained.
- ☐ Signs designed with anti — graffiti measures (e.g. height, protective surface coatings and no vinyl lettering).
- ☐ Signs provide emergency medical contact details.
- ☐ Signs provide contact details (including after hours) for the council.
- ☐ Schedule in place to inspect and maintain signs.
- ☐ Strategies in place to take additional action when signs are persistently ignored.
- ☐ Agreed process in place to exclude inappropriate users at supervised facilities (signage and ticketing).
- ☐ Resources allocated to respond to community feedback.



Communication

- ☐ Agreed consultation process with key stakeholders (e.g. users, user groups, community groups, neighbours) in planning, design and construction phases.
- ☐ Suitable information prepared for use in council publications, local media and other outlets.
- ☐ Strategy in place to regularly target primary and secondary schools with information, (e.g. the rules and the reasons for them) and specific education programs.
- ☐ Process for regular communication with users, the community, clubs and associations.
- ☐ Education programs designed and organised for existing and potential users.
- ☐ Mentor program established using older participants.

Skaters' checklist

Key chapter: 8

How to develop a skate facility

- ☐ Be prepared
- ☐ Establish there is a need
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- ☐ Planning and design of the site
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- ☐ Financing the development
- ☐ Detailed design documentation
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- ☐ What's next?
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Reduce the risk of injury

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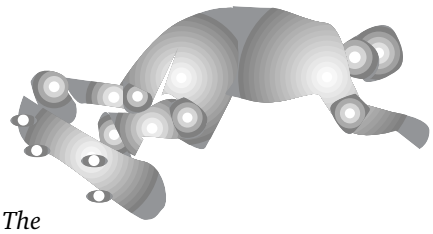
- ☐ Skate legal
- ☐ Skate alert
- ☐ Skate polite

Notes



1. This section contains information sourced from Michael Brooke, *The Concrete Wave* (Warwick Books, 1999) cited at www.interlog.com.
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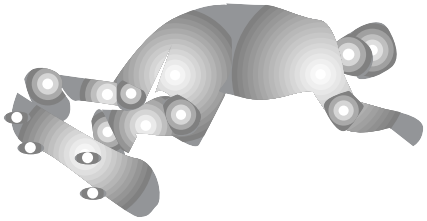
3. ibid.
4. ibid.
5. International Association of Skateboard Companies (IASC) website, www.skateboard.com/iasc.
6. Tim Leighton-Boyce cited on the Dansworld Skateboard website.
7. Surveys conducted among children in the cities of Casey, Greater Geelong, Hume, Knox, and Hobsons Bay by Jeavons Recreation & Tourism Planners.
8. International In-line Skating Association (IISA) website, www.iisa.org.
9. ibid.
10. Interviews conducted for this study with industry, venue managers and local government.
11. IISA website.
12. ibid.
13. Personal communication from the IASC, 1999.
14. YMCA, *The Sailyards Skatepark, Swanston Street, Melbourne*.
15. Research cited in the *Albert Park Skate Shop* brochure.
16. *Skateboard Facility Planning: A Manual for Local Government* (Sport and Recreation Victoria, 1990), p.44.
17. Leisure and sports participation studies conducted by Jeavons Recreation & Tourism Planners between 1992 and 1999 for Victorian local governments.
18. *City of Casey Skate Strategy* (Jeavons Recreation & Tourism Planners for the City of Casey, 1999).
19. *Participation in Sport and Physical Activities: Selected Organised Sport and Physical Activities 1996–97*. ABS cat. no. 4177.0. Covers both school-organised and club-organised activities among *children aged 5–14 years*.
20. Surveys of more than 500 children each conducted for the cities of Greater Geelong, Hume, Knox, Casey, and Hobsons Bay by Jeavons Recreation & Tourism Planners.
21. Monash University Accident Research Centre, 1999.
22. *Small-Wheeled Transport Strategy* (ACT Department of Urban Services, 1995)
23. *Report on the Inquiry Into the Use of Skateboards and In-Line Skates Near Shops*, Report No. 5 (ACT Standing Committee on Social Policy, April 1997).
24. Stina Sandels, *Children in Traffic*, 1975
25. Surveys of 500 school children conducted by Jeavons Recreation & Tourism Planners for Victorian Local governments.
26. See Chapter 2: The Market.
27. *City of Casey Skate Strategy* (Jeavons Recreation & Tourism Planners for the City of Casey, 1999).
28. *Understanding Planning: Your Guide to Planning in Victoria* (Department of Infrastructure, 1996).

29. *Triabunna District High School vs. Glamorgan-Spring Bay Council* [1996] TASRMPAT 319 (23 December 1996).
30. *Rick Arnold vs. CC Prospect No. ERD–99–338* Judgement OE21 [1999] SAERDC 21 (14 April 1999).
31. Adapted from WCIA website
32. Anything larger than 60mm will not accommodate skateboard truck widths.
33. Such as Jota Coat 605. This product has temperature resistance is up to 120° C and is resistant to water, solvents, chemicals and abrasion. It has an expected life of some ten years and can be re-coated easily. It also has GPC approval (G29/7a) and can be tinted to any colour. Information provided by Jotum Paints.
34. Master Builders Technologies, *Product Selection Guide*.
35. Verbal communication from Conquest Skate Park staff.
36. Information provided by a noise control engineer at MDP Construction & Engineering Pty Ltd.
37. ibid.
38. Standards Australia and Standards New Zealand, *Guidelines for Managing Risk in the Australian and New Zealand Public Sector*, AS/NZS HB143:1999.
39. Australian and New Zealand Sports Law Association, *Published Papers, 4th Annual Conference*.
40. VISS Emergency Department presentations 1988–96, and personal communication from the Monash University Accident Research Centre.
41. Shauna Sherker and Erin Cassell, *In — Line Skate Injury: A Review of the Literature* (Monash University Accident Research Centre for Sport and Recreation Victoria, 1998).
42. In — line Skating Club of Boston's safety gear webpage.
43. *Hackshaw vs. Shaw* (1984) 155 CLR 614, p.663.
44. Skatepark.org.
45. This section has been adapted from Helen Proctor, "Recreation and the Law" in *Skateboard Facility Planning: A Manual for Local Government* (Sport and Recreation Victoria, 1990).
46. Standards Australia and Standards New Zealand, *Guidelines for Managing Risk in the Australian and New Zealand Public Sector*, AS/NZS HB143:1999.
47. Based on International In — Line Skating Association guidelines, IISA website.
48. ibid.

Read on



There are hundreds of websites dedicated to skateboarding, in — lining and BMX. A few websites and publications that you may find of interest are listed below.

Getting a skate park built

- Skatepark.org
  www.skatepark.org
  This site (replacing legalskate) serves as a resource for everyone involved in the process of getting a skate park built, and promoting skateboarding. This site includes information on fundraising, history, industry contacts, insurance and liability, ramp construction, skateboard culture. A site dedicated to helping skaters with issues about planning parks.

Ramp designs

- There are hundreds of ramp design sites, including:
  www.bayinsider.com/partners/heckler/ramps/reloader.frm
  www.toxboe.suite.dk
  www.skateboard.com/tydu/skatebrd/organisations/iascblue.html
- Look up Skatelite material on …
  www.richlite.com/skate

Insurance

- Washington Cities Insurance Authority
  www.mrsc.org
- California Insurance Authority
  www.tumyeto.com/skate/SPARK/insurance.html
- Skate Park Resource
  www.skatepark.org

Organisations

- For local associations and more …
  www.skateboard.com
- Aggressive Skaters Association
  www.agroskate.com
- BMX Association of Victoria
  www.victoria.bmx.org.au/watisbmx.htm
- International Association of Skateboard Companies
  www.skateboard.com/iasc
- International In-line Skating Association
  www.iisa.org
- Skatepark Association of USA
  www.spausa.org

Safety and risk management

- Australian and New Zealand Sports Law Association. *Published Papers, 4th Annual Conference*.
- Scott, Russ. "Risk Management — Concerns for Organisers of Children's Sport".
- Standards Australia and Standards New Zealand. *Guidelines for Managing Risk in the Australian and New Zealand Public Sector*. AS/NZS HB143:1999.
- Standards Australia and Standards New Zealand. *Risk Management*. AS/NZS 4360:1999.

Statutory planning processes

- Department of Infrastructure. *Understanding Planning: Your Guide to Planning in Victoria*. 2nd edn. 1996.
- Women's Planning Network. *Women's Guide to Town Planning*. March 1997.