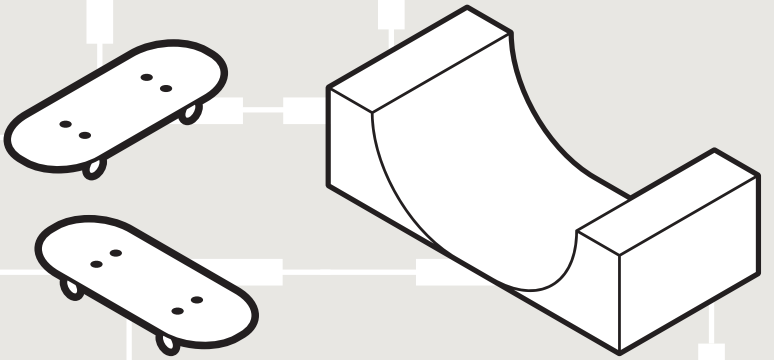
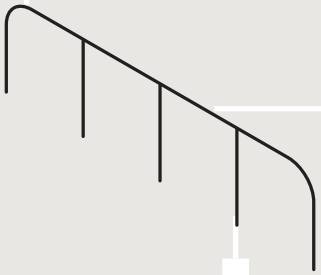
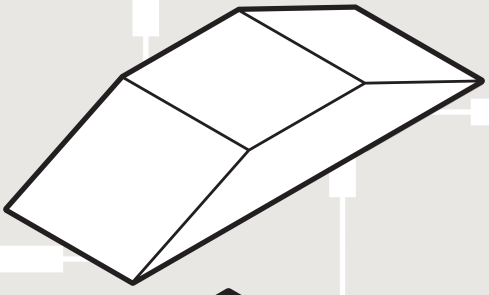
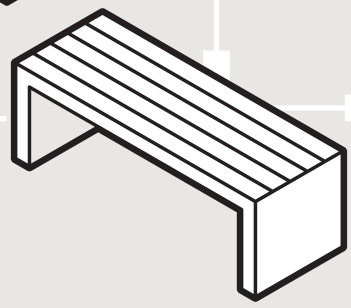
TOOLKIT









CITYSKATE

VDZ+A & NEWLINE

JUNE 2024

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WHY CREATE A SKATE AMENITY?

Skateboarding creates opportunities for recreation, supports mental and physical health, builds community, particularly among urban youth and young adults, and increases economic activity. Integrating skate amenities or skate-friendly spaces throughout the city or other municipality can improve social vibrancy and support the inclusion of a diverse user group.

WHAT IS THE TOOLKIT?

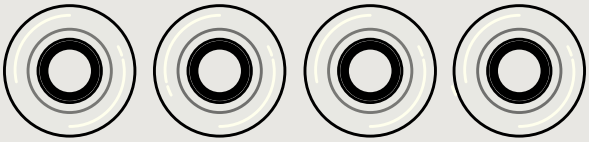
The purpose of this toolkit is to help civic decision-makers understand what makes for a successful skate amenity, who commonly uses it, how it is typically used, and how to creatively integrate it into a variety of unique spaces throughout the city or other municipality.

This toolkit is intended to provide people with limited knowledge of skate terrain design with the knowledge and basic tools needed to create simple, accessible, safe, and fun riding opportunities. Please note that this toolkit only covers the basics of skate amenities and is not a replacement for professional skate space design.

WHAT IS SKATEBOARDING?

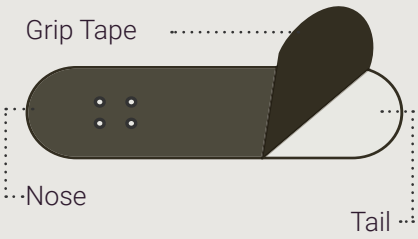
Depending on the rider's perspective, skateboarding can be a mode of transportation, an outdoor recreational sport, an outlet for creative expression, or a way of life. At its most basic, a skateboard is a plank of wood with four wheels attached that a person can stand on and use to propel themselves across a smooth surface. Since first emerging in the 1950s, skateboarding has evolved into an extremely diverse everyday recreational activity with millions of participants across the world.

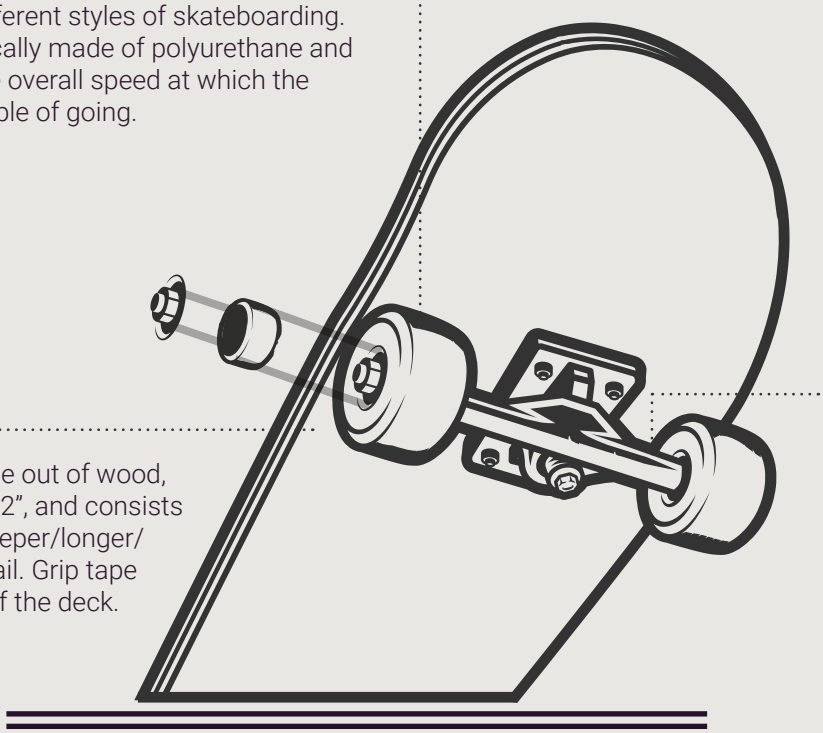
ANATOMY OF A SKATEBOARD

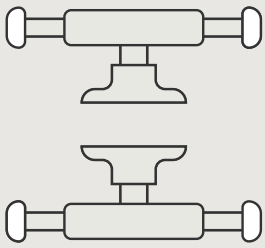


Wheels

Come in a variety of sizes and durability tailored to different styles of skateboarding. They are typically made of polyurethane and determine the overall speed at which the setup is capable of going.







Deck

Typically made out of wood, sized at 8" x 32", and consists of a nose (steeper/longer/taller) and a tail. Grip tape goes on top of the deck.

Trucks

T-shaped metal pieces that securely attach the wheels and bearings to the underside of the deck. They are what make contact with a surface when a user is 'grinding'.

COMMON SKATE ‘MOVES & TRICKS’

Push Carve Ollie Grind Flip

SKATE MOVES EXPLAINED

Push

A push is the primary way to generate speed on a skateboard or scooter when on flat ground. To push, the rider balances one foot on the board or scooter while using the other to push off from the ground, propelling the rider forward.

Carve

A carve describes a turn with a more-or-less consistent radius that is achieved when a rider leans their weight to one side or the other. Carving can be done on flat ground. It can also be used to reduce speed when going down a hill, generate speed on ramps, and transition between skate features. Carves are moves performed by all sorts of skate amenity users. The mechanics of carving will vary.

Ollie

The ollie is the foundational move in street skateboarding, where a rider jumps and lifts the skateboard into the air through a “see-saw” motion, putting pressure on the tail of the board and lifting the board into the air with the front foot. The move was invented in the late 1970s and early ’80s and revolutionized skateboarding, opening new potential terrains to skateboarders, which helped pave the way for modern street skateboarding.

Grind or Slide

Grinds and slides are feature-based tricks in which the rider maneuvers their skateboard, roller skates, bike or scooter to slide their equipment with momentum rather than the rotation of their wheels. Whereas a grind typically refers to a metal component being pushed on a feature (i.e. skateboard trucks or BMX pegs), a slide typically refers to a non-metal component sliding on a feature (i.e. skateboard decks or wheels). Slides are also performed on ground surfaces as a way of slowing down. There is a wide range of variations and difficulties of grinds and slides that are unique to each skate amenity user group.

Flip

In skateboarding, a flip is when the skater performs the general motion of an ollie but adds in adjustments to foot positions and movement to spin the skateboard in different directions before landing back on it and rolling away. There are many different flip tricks with varying levels of difficulty. They are often used in sequence with other tricks to increase difficulty. In BMX, scootering, and roller skating, flips refer to the rider themselves spinning backwards or forwards in the air.

Manual

A manual is a skateboard, scooter, and BMX trick in which the rider elevates the front wheel(s) off the ground and balances on the rear wheel(s) while riding along. The nose manual is a variation of the manual in which the rear wheel(s) are elevated instead of the front wheel(s). In BMX riding, a manual involves shifting body weight, whereas a wheelie uses pedalling to keep the front wheel elevated.

Air

An air in skateboarding, BMX, roller skating and scootering refers to the launching of a rider into the air, typically off of a ramp, gap or drop. Airs can be combined with flips and grabs to increase difficulty and show off a rider's unique style and creative expression.

UNDERSTANDING SKATE AMENITY USER GROUPS

Although the majority of skate amenities are designed with skateboarding in mind, the skate community includes a diverse user group that uses skate amenities to participate in a number of different activities. Understanding the different user groups that use skate amenities can help guide decisions about planning, sitting, designing, and constructing skate amenities.

SKATEBOARDERS

There are many different styles of skateboarding, each with its own unique needs in a skate amenity. As a unifying feature, all skateboarders require a surface that is dry and smooth enough to roll on with minimal resistance. Because skateboarding is always changing and evolving, these categories are an overview and will not represent every type or style of skateboarding.

Street

Street skating is the most common style of skateboarding represented in popular culture. It utilizes obstacles inspired by features of the urban landscape, such as stairs, ledges, and rails.

Freestyle

Freestyle skating is one of the oldest forms of skateboarding. It typically occurs on smooth, flat ground but can also incorporate street-style features at times.

Transition

Transition skating utilizes curved radius inclines that mimic backyard pools and ramps. This style of skateboarding often occurs in purpose-built skateparks characterized by terrain that includes bowls, quarterpipes, banks, and more.

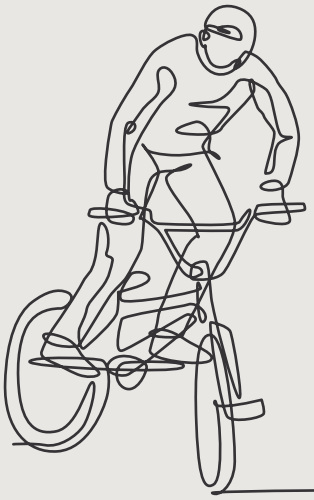
Downhill

Downhill skating is characterized by carving down hills, often at high speeds. Downhill skaters use longer boards and softer wheels to improve stability and grip.

Transportation

Many people also use skateboarding primarily as a means of transportation. These skaters may use softer wheels like downhill skaters to improve grip and smooth out the ride but paired with shorter boards that are easier to manage on buses, trains, bike racks, etc.

BMX



BMX bikes are designed specifically for dirt racing and/or tricks and are recognizable by their smaller wheels than on traditional bicycles. From racing dirt tracks in the 1960s, BMX has grown to encompass a wide range of riding styles, including racing, dirt jumping, freestyle flatland and street riding. Street and park-style BMX riders will use many of the same features as other skate amenity users but are more inclined to ramps, banks and transitions and are less susceptible to poor surface conditions.

ROLLER-SKATERS

Quad

Quad roller skates predate skateboarding by hundreds of years, with the earliest iterations of roller skates dating back to the 1700s. As their name suggests, quad roller skates are characterized by a boot with four wheels. Two wheels are mounted at the rear and front, respectively. A rubber toe break is a common addition. Roller skating takes place in a number of contexts ranging from dance-inspired roller discs to competitive full-contact derbies. More recently, quad roller skaters have been taking to skateparks, using ramps, banks, and other features as the foundation for new tricks.

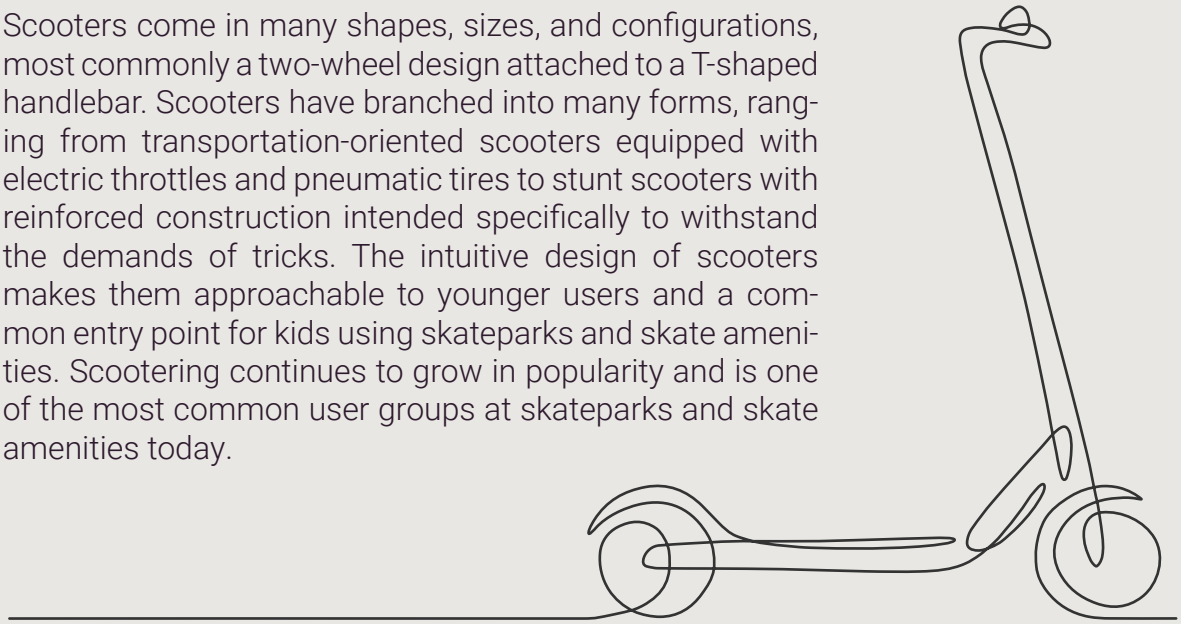
Inline

Like quad roller skates, inline skates (roller blades) typically have four wheels, the major difference being they are oriented in a linear arrangement, similar to a typical ice skate. Inline skating took off in the early 1990s, with early adopters of the sport performing tricks

on much of the same terrain and street features used for skateboarding. Inline skates have evolved over the years with modern designs featuring more robust construction that is better suited to grinds and impacts. The sport attracts dedicated users who are frequently found at skate amenities and skateparks.

SCOOTERS

Scooters come in many shapes, sizes, and configurations, most commonly a two-wheel design attached to a T-shaped handlebar. Scooters have branched into many forms, ranging from transportation-oriented scooters equipped with electric throttles and pneumatic tires to stunt scooters with reinforced construction intended specifically to withstand the demands of tricks. The intuitive design of scooters makes them approachable to younger users and a common entry point for kids using skateparks and skate amenities. Scootering continues to grow in popularity and is one of the most common user groups at skateparks and skate amenities today.

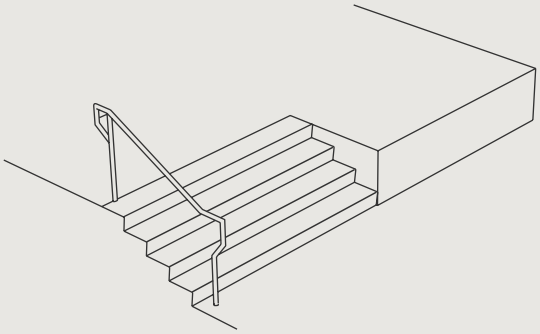


BUILDING BLOCKS OF A SKATE AMENITY

A skate amenity is a single feature, combination of features or space that skaters and riders commonly utilize. The most important aspect of a successful skate amenity is a smooth ground surface. Once a smooth surface is available, additional features can be added to create more opportunities for creative interpretation by skaters and riders. Street-style features like ledges, rails and stairs mimic the urban landscape, while transition-style skate amenities like quarter pipes, bowls, banks and ramps are designed specifically for skating and riding. The nature of skateboarding allows features to be used in a variety of ways depending on riding style and ability level.

STAIR / DROP

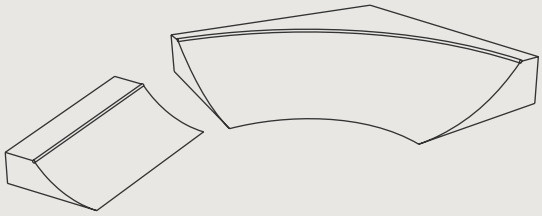
Varying Heights and Lengths



Stairs and drops create a gap to be jumped over and down. The larger the drop or stair set, the more space is required above and below the gap for run-in and run-out.

RAMP / BANK

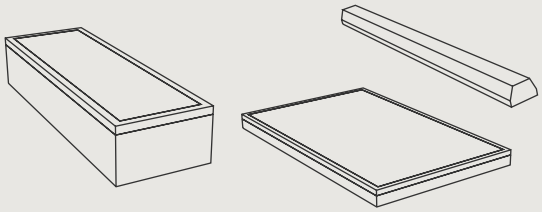
Slope / Length / Quarter / Half



A ramp is a feature that transitions from the ground plane to an elevated area. Ramps range in height, curve, and steepness. The specific orientation and design of a ramp will determine how it will most often be used. Increasing the height and steepness of a ramp increases its difficulty in riding. Ramps can be used at the edge of spaces as a drop-in spot as well as a turnaround feature, redirecting the skater or rider back in the direction they approach from.

LEDGE

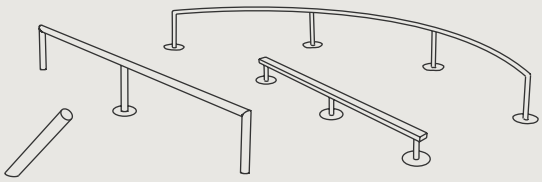
Pad / Curb / Bench



A ledge is typically a rectilinear box feature with edge material that is conducive to grinds and slides. Ledges can be curved laterally or vertically and, if wide enough, can also function as a manual pad with skaters and riders jumping onto the top surface and balancing in a manual before jumping off the other side. The height and slope (if any) of a ledge increase its difficulty, with the most basic ledge being a typical curb.

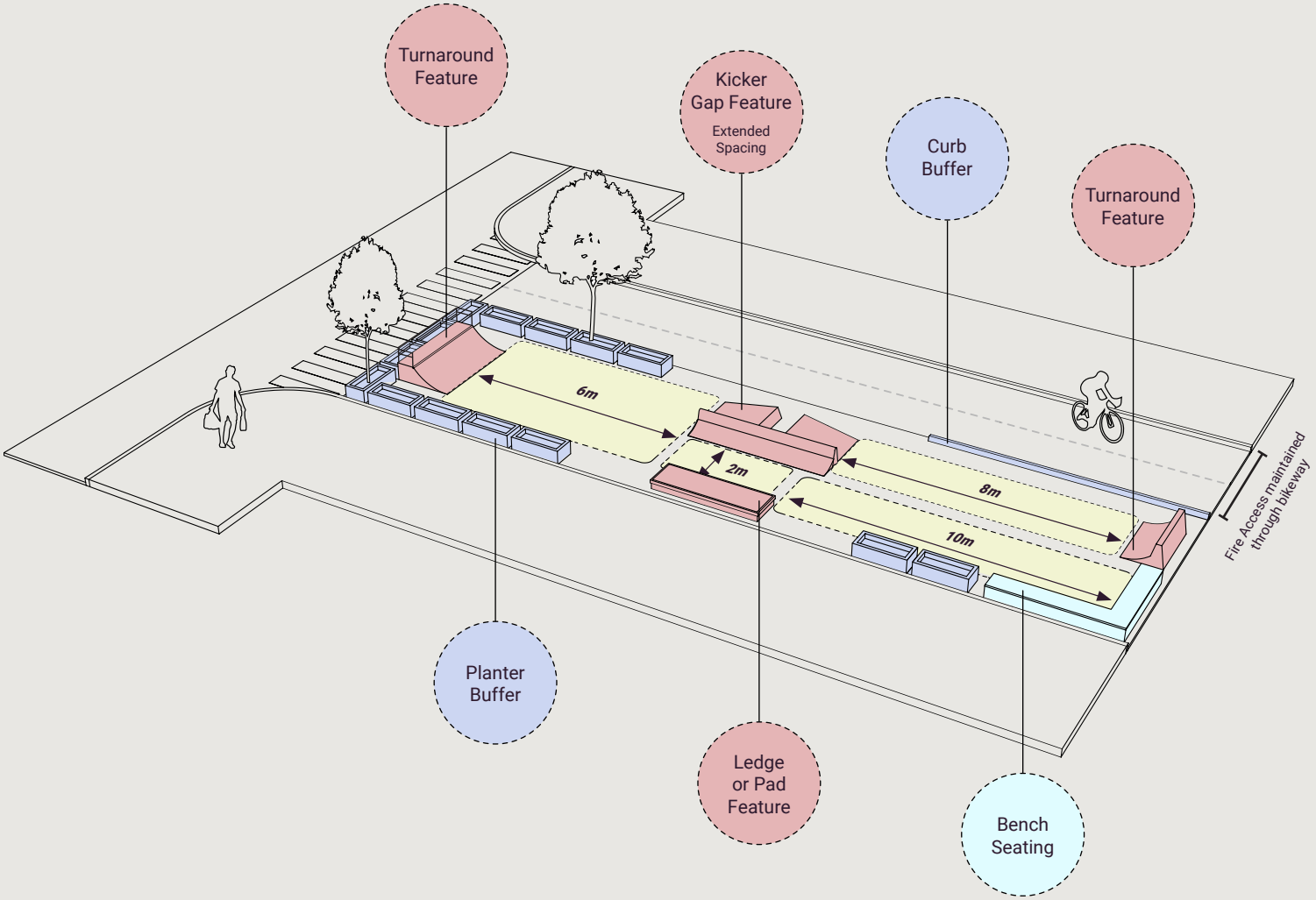
RAIL

Flat / Low / High / Long / Curved



A rail is a grind-and-slide feature typically constructed from metal tubing and mounted to the ground. Rails can be combined with stairs and drops, with taller and steeper rails being more difficult to ride. Rails can also have rounded or flattened profiles, changing users' experience.

SPATIAL REQUIREMENTS



Legend

- Edges
- Seating and Rest Area
- Types of Features
- Approaches and Landings

Spatial Requirements

2m — Space between Features

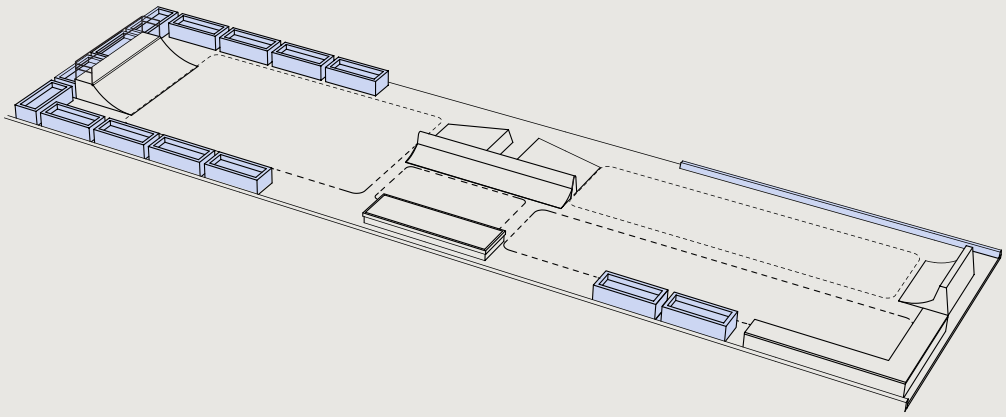
6m — Unbold Compact Approach (acceptable with Turnaround)

8m — Typical Approach

10m — Ideal Approach

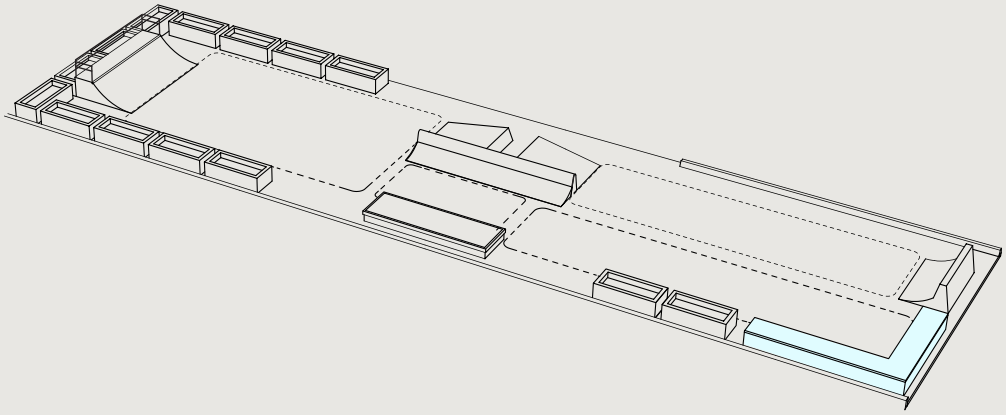
Edges

Edge conditions are important to delineate space prioritized for skateboarding and other wheeled sports from other nearby uses. Hard edges like concrete barriers, raised planter boxes, and curbs can prevent skateboards from rolling out into adjacent areas. Soft edges, like changes to coarse or textured ground surfacing, can also help separate skate-oriented spaces from adjacent areas. Caution should be used to avoid creating blind corners, particularly where different users may be co-existing.



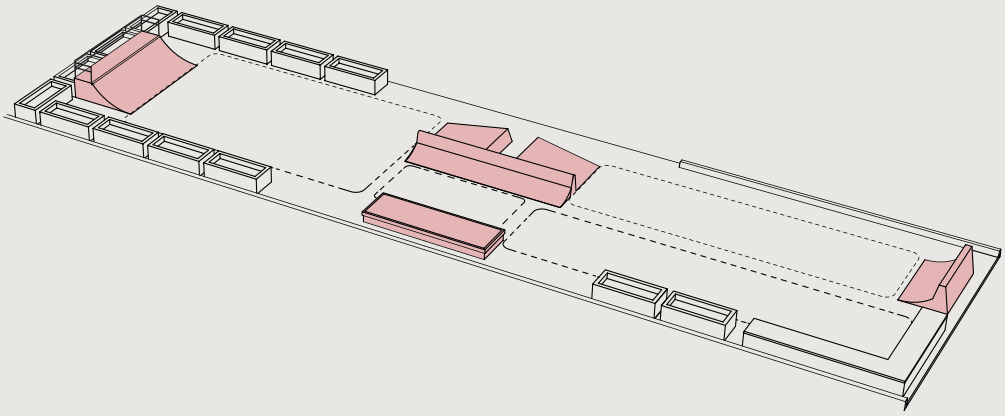
Seating and Rest Areas

Skateboarding and other wheeled sports are very social in nature. Providing passive space for users to congregate with friends, store belongings, or take a break is important for any successful skate amenity. Seating, waste bins, and plantings are great complements to these areas. Adjacent public space may provide rest areas where space within the skate amenity is limited.



Types of Features

Individual skate features can be combined in a variety of ways to create a skate amenity or spot. The size and shape of features combined with their overall layout will determine how much space is required for users to ride between features in the space.

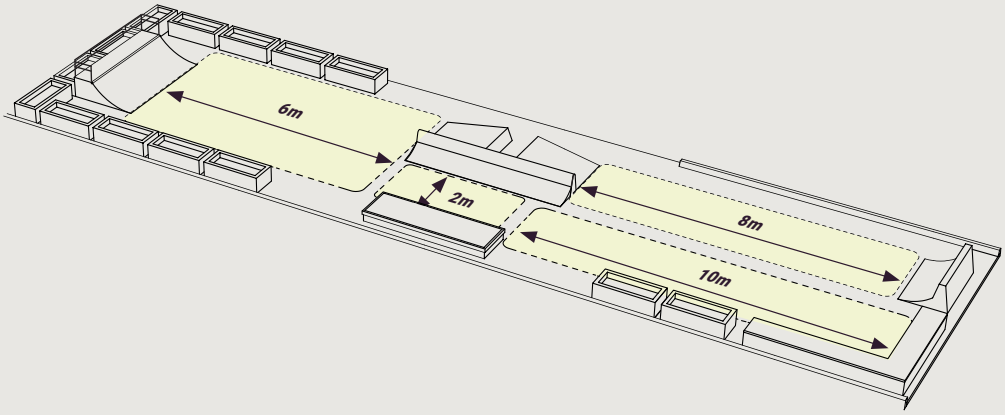


Approaches and Landings

Street-style skating requires space before and after a feature for the skater to gather speed, set their feet, perform the trick, and roll away safely. These spaces do not necessarily need to be wide but must be long enough to provide enough time to roll into and away from the feature.

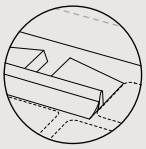
8-10 metres is an adequate approach distance, with 4-6 metres being a minimum length that should be associated with a turnaround feature that allows a skateboarder to maintain speed. Larger features will typically require more approach space than smaller features. As a rule of thumb, a similar amount of space should be given for an approach and a landing.

Turnaround features like mini ramps, banks, and quarter pipes can be used at edges to facilitate back-and-forth skating and improve the overall flow through the space.



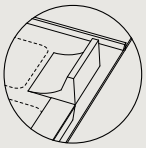
SPATIAL PRECEDENTS

Technical Features



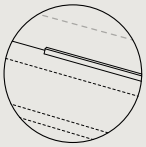

Types of Approaches

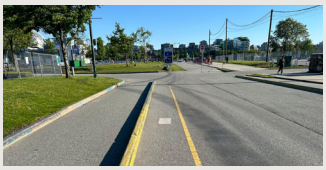
Turnaround Feature




Types of Edges

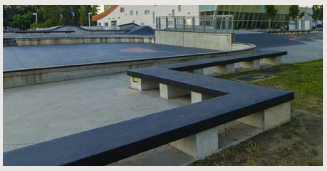
Curb Buffer



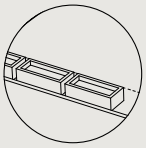



Seating






Planter Buffer

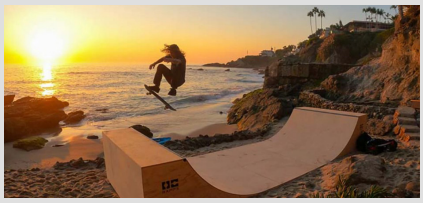



POTENTIAL STYLES + TYPOLOGIES

Compact Transition

Minimal space required:
6m long x 3m wide

Small-scale mini-ramp and mini-bowl features require a small footprint and less run-in and run-out space than street-style skate amenities. Prefabricated skate ramps are acceptable as temporary features, but they degrade quickly in wet weather. Concrete features are preferred and should be designed to fit the context of the site.

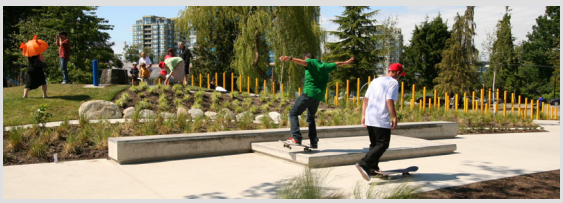




Street Style

Larger space required:
22m long x 3m wide

The street spot reallocates a portion of a road right-of-way for a skate amenity. The 'Street Spot' type creates a local destination for skaters to travel to and spend time at. Ideally, the space has hard edges adjacent to obstacles and features and soft edges at designated entrances to the spot. Providing a rest area will be important if there are no opportunities for seating nearby.

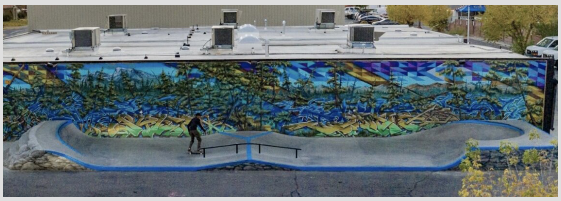




Flow Through

Linear space
typically required

'Flow Through' spots make use of extra width adjacent to greenways and are intended to introduce a fun element for skaters and commuters alike. The design of these spaces should prioritize accessibility to a wide variety of wheeled activities with features that can be ridden on commuter bikes as well as skateboards.

INTEGRATING SKATE AMENITIES IN URBAN PLAZA AND PEDESTRIAN AREAS

While creating a dedicated and separated skate space is ideal in some cases, single and/or small-scale skate features or 'skate dots' can also be easily integrated into existing plazas, pedestrian areas and public space. Doing so requires some considerations for cohabitation but can improve the overall vibrancy of the public space, particularly in under utilized areas.

	 DO'S	 DONT'S
DEFINING SPACE	Ensure existing uses are maintained after introducing a skate amenity.	Overlap incompatible uses without adequate space.
	Use site furnishings, materials, planters, and softscape areas of the plaza to suggest primary uses.	Completely fence-in an area unless absolutely necessary.
	Create opportunities for sharing site amenities like rest areas, seating areas, and water fountains.	Create exclusive areas for specific user groups.
CIRCULATION	Ensure your skate amenity does not interfere with primary pedestrian circulation through the space.	Put skate features in congested pedestrian areas.
	Take advantage of underutilized width in circulation routes to 'bump-out' an area for a skate amenity.	Rely on busy or congested pedestrian areas for 'run in' or 'run out' areas of a skate feature.
MATERIALS	Use textured or bumpy surfaces for areas not intended for small-wheeled sports.	Install skateboard deterrents in areas that are underutilized, unprogrammed or not busy.
	Use steel, stone or other hard-wearing material.	Use coarse surface materials within the 'run in' or 'run out' of a skate feature.
VISIBILITY	Find opportunities for skate features in prominent locations within the space.	Locate skate amenities in hidden or secluded locations.
	Ensure clear sight-lines around skate features.	Create blind corners, particularly in the 'run up' and 'run out' areas.

IDENTIFYING SUITABLE SPACES

These questions help identify whether a site is suitable for use as a skate amenity space. While some spaces will be more optimal than others, a skate amenity can be built in nearly any location with the right design considerations.

Potential Ideal Location

If the majority of criteria fall into this category, you have yourself a winner! This site will require minimal preparation to be a great skate amenity.

Suitable Location with Some Potential Modifications

If the majority of criteria fall into this category, your site will need a little bit of work but has the potential to be a great skate amenity!

Less Than Ideal Location

If the majority of criteria fall into this category, the location will require more investment to be successful. But don't give up - many site constraints have simple solutions!

1.	How close is this to a residential building?	Further than 100m	Between 50m and 100m	Closer than 50m
2.	How close is it to vehicle traffic? Where is it located?	Away from traffic (Separated from traffic or not within a street right-of-way)	On a quiet street right-of-way	On a busy street right-of-way
3.	How steep is the slope on site?	Less than 2-3%	4% to 6%	Greater than 6%
4.	How wide is the space?	Greater than 7m	3 to 7m	Less than 3m
5.	How smooth is the surface?	No significant cracking, spalling, or seam splitting	Some surface coarseness, but repairable	Extreme coarseness, cracking and exposed aggregate

BENEFITS OF PROXIMITY TO OTHER LAND USES

Skate amenities are more likely to be successful when co-located with certain land uses. Below is a list of places that will enhance locating a skate amenity in a particular area:

NEXT STEPS:

Now that you've considered adding a skate spot and you've identified a space suitable to host this amenity, there are several things to do before making this a reality:

SKATE YOUR JOURNEY

1 Land Ownership

It may be the property of the municipality or owned by a private developer or third party. If you don't own the land for the intended site, you will need to work with the land owner to explain and create support for the project.

2 Municipality Department Consultation

This will depend on where the amenity is located, its adjacencies, and what is proposed for the space. Key issues and departments include but are not limited to:

- Transportation or Engineering:
  Reallocate space on a road right-of-way
- Transportation, Engineering or Parks:
  To use space alongside a multi-use path or greenway
- Fire Department:
  To determine fire access requirements
- Development Planning:
  Located on public or private land
- Parks:
  Located on or adjacent park land

3 Public Engagement

If there is no precedent for skateboarding in this location, public engagement will likely be required to gauge the level of support, to provide information to the public, and to get feedback from the community.

4 Funding

Determine who will cover the costs of design and installation. If this is a municipality-led project, it will depend on which departments are supportive of the project, and a cost-sharing approach may be an option. If this is a private project or community initiative, it may be funded by a specific company or organization or via grants.

5 Construction

Determine if the construction will be completed by municipality staff or through a private contractor. Where applicable, specialty skatepark builders are recommended.

6 Maintenance and Stewardship

While a municipality department may be responsible for basic maintenance, the project is more likely to succeed if stewards are willing to accept more frequent maintenance and care. Non-profit organizations with a number of interested volunteers are a good option for stewardship.

7 Liability

Determine how to navigate liability while reducing risk to all parties. Seek legal advice to ensure proper coverage.

Signage is recommended to inform the public to ‘ride’ at their own risk.

YOU CAN DO IT!

You now have the basic tools needed to create simple, accessible, safe and fun riding opportunities where appropriate. You will be making a positive difference for youth in the community.

Now, let’s get out there and creatively integrate skate amenities into a variety of unique spaces!