



WHITE PAPER

# Playground Surfaces: What Works (and Plays) Today



# Playground Grass: Keeping Children Safe and Happy at Play

## Why Playground Surface Matters

Playgrounds have steadily evolved over their 125+ year history in the US, from see-saws and monkey bars built on asphalt or dirt park grounds to today's sophisticated playground designs that engage children while providing a safer environment than years past.

This paper looks at the evolution of playground surfaces and offers city and school planners and playground architects guidance on what to look for when choosing the right surface for a new playground – or when the time comes to upgrade existing playground surfaces.

## The Art of the Possible: Playground Surface Evolution

The early 1900s saw the growth of playgrounds throughout the US, with virtually all playgrounds built upon hard ground, soil, pavement, or other hard surfaces. Although children in both urban and rural areas flocked to them, the frequent occurrence of injury caused by fall or scrape caused designers to switch to other surfaces. The alternates that appeared during the course of the 20th century included:

- **Sand** Although sand is inexpensive and readily available, sand becomes hard when it's wet and thus did not significantly reduce the number of injuries.
- **Loose-fill** Although these materials (including rubber chips, engineered wood fiber (EWF), and pea gravel) offered some degree of fall protection, often these playground surfaces introduced their own problems. Splinters and choking hazards abounded, and toddlers often ended up with pea gravel lodged in an ear or nose. Besides those hazards, loose-fill materials were easily displaced from directly under play surfaces, further limiting their usefulness.

All these materials could also harbor hidden hazards. Sharp objects like discarded syringes could mix in with sand or loose-fill. Finally, consider the issue of cleanliness. Loose-fill is just plain dirty – hard to clean, susceptible to mold and mildew growth, and a great hiding place for nesting insects, snakes, and rodents.

The arrival of the 2000s brought a host of new regulations like the Americans with Disabilities Act (ADA) which impacted playground accessibility. These regulations led to the increase in the use of unitary rubber surfaces such as tiles, bonded rubber, and poured-in-place surfaces to help meet these regulatory requirements.





# Twenty-first Century Innovations

What factors are most important drivers for playground surface evolution today? It comes down to safety – and the child’s (and parent’s) user experience (UX).

Modern-day designers and planners look beyond accessibility mandates, with an eye to meeting demands from the user base which includes parents, children, and educators. Some of the wish-list items that impact playground surface selection include:



Increasing requests that playground surfaces look, feel, and play like natural materials



The demand for a better play experience for children who utilize the playground



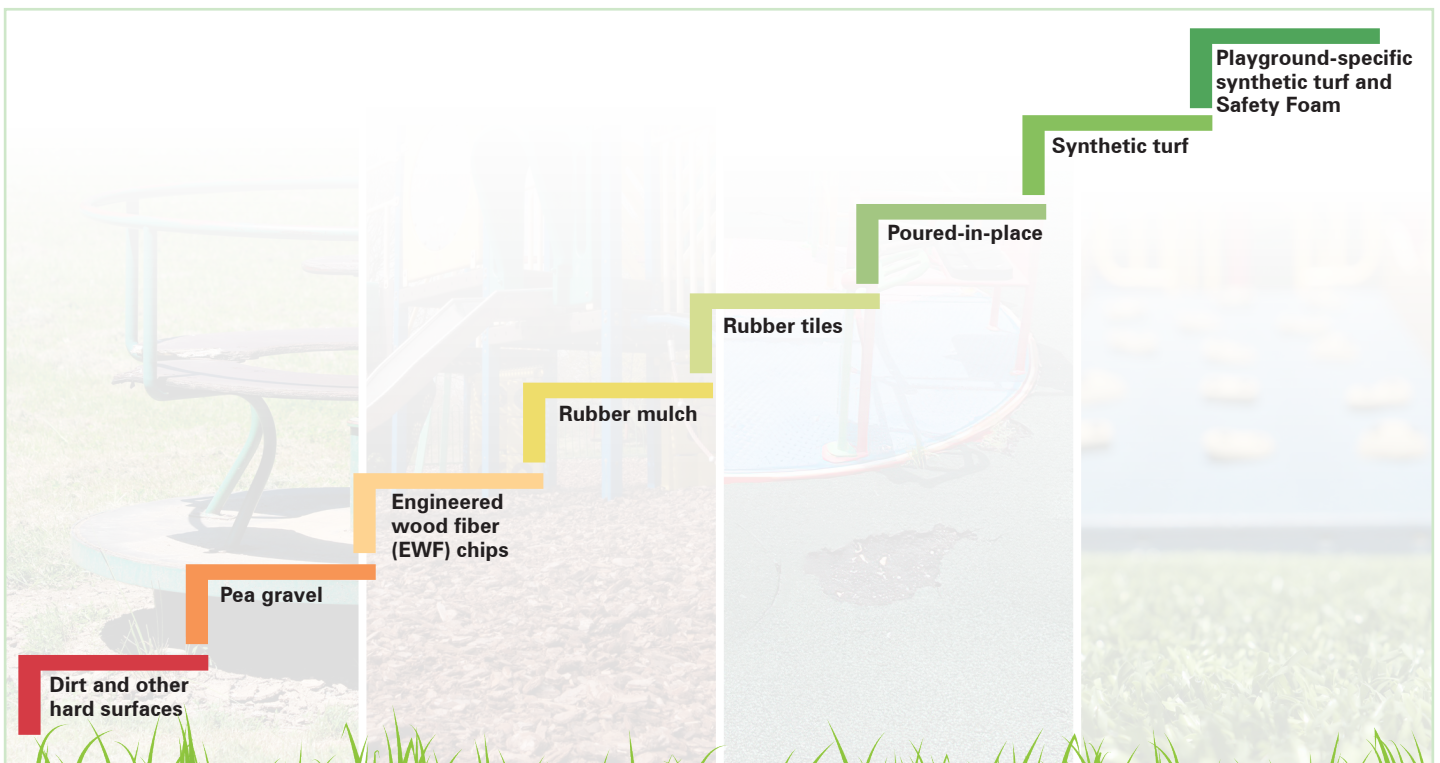
Desire for surfaces that can increase the amount of outdoor playtime after inclement weather

## Price Surfaces

## Everyday Surfaces

## Higher-end Surfaces

## Premium Surfaces



# The Emergence of Synthetic Turf

The biggest safety challenge is the need to meet or exceed ASTM attenuation and fall height requirements, as well as a desire from designers to satisfy 'all of the above' wish-list requests for both the children's experience and safety has led to the emergence of synthetic turf as a surface of choice.

For starters, designers and planners can benefit from the decades of experience in the use of synthetic turf for athletic fields, which share some of the same characteristics as playgrounds. Synthetic turf also offers vastly improved drainage over previous materials, which enables children to play outside immediately after bad weather passes. In effect, the improved drainage and rapid recovery from weather can extend the season for outdoor play.



## What are Playground Must-Haves?

A recent research study "Investigating the State of Play"<sup>1</sup> ranked those factors deemed most important in playgrounds and that might impact playground surfaces. Not surprisingly, the cleanliness and appearance of playgrounds was rated as the most important factor. Other factors rated very important included safety along with the 'fun factor' that the playground offers to children and students who utilize it regularly. The results were favorable for synthetic turf which is the

best choice for cleanliness, safety, regulatory compliance, and maintenance as well. Survey respondents, comprised of park officials and education administrators, further categorized safety surface options along a continuum which they considered least favorable to best overall. In that rating, synthetic turf – in particular playground-specific synthetic turf with foam padding for an additional level of safety – rated best overall.

Item	Ranking	Item	Ranking
Cleanliness	9.2	Passive Spaces	7.7
Overall Appearance & Appeal	8.7	Safety and Age-Appropriate Signage	7.7
Overall Fun Factor	8.7	Active Spaces	7.5
Socialization Spaces	8.2	Natural Play Elements	6.7
Regular Maintenance	8.0	Strict Safety Factors (such as Fall Height Compliance)	6.3
Safe Play Elements that Look Risky	7.8	Allergen-Free	6.2
Design / Elements for All Ages	7.7		





# The ForeverLawn Difference

The current state-of-the-art innovator in the historied evolution of playground surfaces is Playground Grass™, a pioneering product designed by ForeverLawn with children in mind and exclusively for use in playgrounds. ForeverLawn Playground Grass is the safest synthetic turf available anywhere on earth. It exceeds ASTM's head injury criterion recommendation and offers the best protection from falls – as evidenced by safety ratings – when used with ForeverLawn's SafetyFoam Pro padding, which is made from expanded polypropylene. These two components work together to create a unique, consistent, reliably safe surface for all kinds of playgrounds. Playground Grass provides unparalleled accessibility as well and improved safety. Parents and designers alike will appreciate the antimicrobial technology that is designed into the blades of select Playground Grass products. And from an accessibility perspective,

Playground Grass also features proprietary XStatic™ antistatic technology, which reduces static build up on the playground surface – an important factor for those users who rely on electronic devices such as cochlear implants. Furthermore, Playground Grass meets ASTM 1951 standard for accessibility of the play surface under and around play equipment. This makes it easier for children with mobility issues to traverse the play area. Since playground surfaces are for, well, PLAY, ForeverLawn offers a broad range of flexible design features that enable customization of playground surfaces, including a variety of standard "Funscape" designs which include elements like play paths, play spaces, and play fields to attract and entertain children. This flexibility enables designers to include Playground Grass as part of the play experience itself – as a play element in its own right, not just a surface that provides safety.

## Experience Matters: What Users Say

Not only do children love Playground Grass, designers and educators do as well. Here are some direct quotes from park superintendents, school administrators, and camp directors who shared their observations after Playground Grass installation.



With mulch we had constant splinters and with other unitary rubber surfaces, we had constant burns and scrapes. Since we put in synthetic turf, we just don't have that anymore.

– **Park District Superintendent**



If we didn't have the playground turf safety surface, they wouldn't be outside as much. That helps them focus themselves for everything else – it has a great impact on the kids as well as the parents.

– **Elementary School Principal**



Kids are more willing to take the leap on our new playground synthetic turf because they know they won't get hurt.

– **Daycare Director**

# Additional Benefits of ForeverLawn

The benefits of Playground Grass surfaces can extend far beyond the playground's physical borders. For example, schools and parks have seen a profound effect on how the community uses playgrounds outside of the school day. Where other surfaces may have become eyesores, residents in areas where Playground Grass has been installed see hard evidence that their tax dollars are being spent to benefit the entire community. Additionally, park superintendents say that community park and school playgrounds with Playground Grass have such an increased aesthetic appeal that they are fueling both new and existing home sales as families are attracted to neighborhoods with these benefits for their children.



## Why Surfaces Matter

A recent nationwide study<sup>2</sup> that focused on playground equipment and surfacing conducted several safety tests and concluded that playgrounds that utilized loose-fill and rubber unitary surfaces showed serious shortcomings, especially when it came to higher fall heights. Some of the results were unsettling, including findings that 75% of loose-fill playground surfacing material had been displaced from its intended location at the time of testing, and

that 40% of loose-fill material had deteriorated surrounding each play structure it was intended to protect.

The study concluded that "it is critical for owner/operators and consumers to be aware of playground safety, maintenance, and the importance of having an appropriate surfacing material under and around all play structures."



**75%**

of loose-fill playground surfacing material had been displaced from its intended location

**40%**

of loose-fill material had deteriorated surrounding each play structure it was intended to protect



# Why ForeverLawn?

ForeverLawn is the leading innovator in synthetic turf, which is the fastest growing play surface in the US today. Playground Grass by ForeverLawn was the first company to develop synthetic turf and safety systems that were created exclusively for playgrounds.

Playground Grass is proudly made here in the USA and is distributed by a growing network of over 85 dealers in the US. Here are some 'firsts' that make ForeverLawn the best choice:

- ForeverLawn is the first (and only) company to develop, design, and market PlayMounds as part of their playground surface
- They are the only design-forward synthetic turf company that offers Funscapes™ – (including Spaces, Paths, and Fields) that can be combined into a unique play surface that can entertain while keeping children safe
- ForeverLawn is the only turf company to manufacture and warranty the entire system

## What is the major takeaway?

Simply this: Playground Grass provides consistent, predictable, and reliable performance over time through the use of vibrant, colorful playground surfaces that are proven to attract a child's attention, tailored to kids' favorite colors, and that enhance their play experience.

## Next Steps

- [Request a sample of ForeverLawn Playground Grass](#)
- [Read the complete white paper](#)
- [Learn more about ForeverLawn Playground Grass](#)



## CASE STUDY

# Lake YMCA

The Lake YMCA of Uniontown, Ohio urgently needed to upgrade its outdoor play area. The existing play structure was not up to safety codes, and therefore the children attending their summer camp could no longer utilize it. While planning an expansion in 2019, they learned about ForeverLawn's Playground Grass and had a custom playground turf area and adult fitness field designed around an outdoor pavilion. The results have been dramatic.

"It's been awesome," says Allen Mangus, Executive Director of the Lake Community YMCA. "The summer camp children use the playground from morning to night, making up games, using the slide, or climbing through the tunnels designed into one of the ForeverLawn Play Mounds," he adds.

When camp is out of session, parents working out at the "Y" or swimming at the pool often bring their children to the playground to enjoy their own playtime. "The adult fitness field is directly adjacent to the children's play area, so parents can keep an eye on the kids while they get their own workout in," says Mangus. The playground has provided an added bonus to the YMCA. Families have been so taken by the combination of the playground, fitness field, and the covered pavilion, that many have asked to rent out the area for parties. "Families using the space for cookouts and graduations have created a new source of revenue for us," says Mangus. "From start to finish, the ForeverLawn experience has been great."



# About

# ForeverLawn

ForeverLawn® improves spaces and communities through innovative synthetic grass solutions. Beginning in 2004 as the daring entrepreneurial venture of two brothers, ForeverLawn has consistently led the synthetic turf industry through groundbreaking approaches to products and practice. As the premium choice for synthetic surfacing, each product is engineered to solve unique consumer needs and desires while maintaining superior standards and natural aesthetics. Today the company services over eighty localized markets through their dealer network, with an impressive regional, national, and international project portfolio.

For more information, call **866-992-7876**, or visit [foreverlawn.com](https://foreverlawn.com).

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Dodge  
Construction  
Network

<sup>1</sup> "Investigating the State of Play" Secondary and Primary Qualitative Research Among End Users: Nautilus Strategy and Research for ForeverLawn Synthetic Turf (March-August, 2020)

<sup>2</sup> "National Study of Playground Equipment and Surfacing." Source: The National Program for Playground Safety (March, 2019)

