Technological Politics & the Marginalization of Users Through Playground Design

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On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

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Introduction:

There are 19 zoned parks in the City of Charlottesville, Virginia, 12 of which contain playgrounds that strive to "enhance the quality of life for all" and "provide quality recreational experiences ("City of Charlottesville Parks & Recreation", 2018)." The City of Charlottesville is home to 47,266 residents. Of this population, 5.8% are under the age of 65 and disabled, and 16% are under the age of 18 ("QuickFacts Charlottesville City, Virginia (County), 2019). However, the 5.8% statistic is not entirely representative of the number of people with disabilities living in Charlottesville, as people who have chronic illnesses and/or temporary disabilities who do not identify as disabled are not counted in the statistic.

A Spatial Audit of the Charlottesville parks was conducted by the University of Virginia Architecture school in 2018 to identify the environmental and design barriers faced by individuals of the community with limited mobility at these spaces. Through analysis of park and playground design features, the Spatial Audit concludes that "…. currently, there is an obvious lack of inclusive and accessible playspaces in the area (Jiang et al., 2018, p.35)." The Spatial Audit then acknowledges "With exclusive playspaces, children with limited mobility do not have equal opportunities for the physical, emotional, social, and cultural growth and creativity associated with play as children without limited mobility (Jiang et al., 2018, p.2)." The focus of the Spatial Audit is technical; it analyzes parks as a complete system and all the features that comprise them, like playgrounds, sports fields, parking lots, pavilions, and restrooms. Despite the significant findings of the Spatial Audit, social impacts of Charlottesville playgrounds are not analyzed nor discussed. If readers view Charlottesville playgrounds as socio-technical spheres rather than purely technical spheres, then they will understand and appreciate how playgrounds influence and shape power dynamics within the community. I argue that Charlottesville

playgrounds are technologies that not only serve technological roles, but also political roles that can result in user exclusion. I will utilize the framework Technological Politics to demonstrate how design elements of Charlottesville playgrounds disenfranchise select users while benefiting others. Through the raw data reports of Charlottesville parks provided by the Spatial Audit Scorecard, I will reveal how ground surface material selection and play features of Charlottesville playgrounds marginalize individuals with disabilities, and therefore, how playgrounds are equally political and technical spheres.

Literature Review:

Extensive research exists that analyzes playgrounds, play, and the resulting exclusion and marginalization of users within these realms. Of which includes: *Playground Usability: What Do Playground Users Say, The suitability of school playgrounds for physically disabled children,* and *The Importance of play.* These research papers are narrowly focused, as each is applied to a specific set of conditions. Although the research goals are distinct, the papers touch on the various health and developmental impacts of play at locations like playgrounds, and how individuals are easily excluded from play experiences through design of such play environments. Unfortunately, these papers tend to gloss over the interconnections between play, playgrounds, and exclusion of users. Further, this field of research has not yet been applied to Charlottesville, VA.

In *Playground Usability: What Do Playground Users Say*, Jacquie Ripat and Pam Becker conducted a study to "...gain an understanding of the experiences of playground use for children with disabilities and their caregivers (Ripat & Becker, 2012, p.144)." Through this study, Ripat and Becker used the "Person-Environment-Occupation" model to conduct stakeholder analysis to organize findings and provide practice and research recommendations. This paper acknowledges

the various benefits of playgrounds and notes how children with disabilities frequently are excluded from play activities due to barriers including play features and the environment. Three themes are concluded from the research, two of which are “playground usability” and “inclusivity” (Ripat & Becker, 2012). The playground usability theme discusses how aspects of playgrounds like specific features, the outdoor environment, and barriers that hinder physical entrance prevent or limit playground access for users with disabilities. The inclusivity theme considers the impacts of a “usable playground” and why they are important:

> “If a child's occupation is play but some children are unable to access a play space, the unspoken message to the children is that they are not welcome in that play space; this may be framed as an occupational injustice (Ripat & Becker, 2012, p.149)”

The conclusions developed by Ripat and Becker coincide with and support my argument that playgrounds are socio-technical as shown through the “playground usability” and “inclusivity” themes. However, this paper merely summarizes experiences of users and does not apply findings to specific playgrounds. Additionally, the research does not focus on nor explicitly state that playgrounds have political roles within society.

In *The suitability of school playgrounds for physically disabled children,* N.M. Yantzi et al. conduct audits of five publicly funded school playgrounds in Toronto Canada to determine how these playgrounds “... contribute significantly to the socio-spatial exclusion and marginalization of physically disabled children (Yantzi et al., 2010, p.65).” The research centers on policy and physical environments of primary school playgrounds that create exclusion of users with disabilities as compared to inclusive efforts made within classrooms. The paper argues that “exclusion occurs through the operationalization of policies, or by virtue of the types of equipment and surfaces that are used” and that “the playground, as a built environment, is ‘an

integral element in the production of social life, conditioning activities and creating opportunities according to the distribution of power in the socio-spatial system' (Yantzi et al., 2010, pp. 66-67)." I too claim that playgrounds are social spaces that exclude select users through various design elements and will later use the work of Yantzi et al. to support my argument. Despite the great insights of this research, this work is narrowly focused on school playgrounds and does not extend to other types of playgrounds.

The research of Dr. David Whitebread et al., *The Importance of play*, contributes great knowledge on "the value of children's play," especially in regard to the social and developmental benefits (Whitebread, 2012, p.3). Whitebread argues that "play in all its rich variety is one of the highest achievements of the human species, alongside language, culture and technology" and that large amounts of evidence support the relationship with play and "...with intellectual achievement and emotional well-being (Whitebread, 2012, p.3)." The research also discusses the economic, social, and environmental challenges related to play. Play within the sphere of playgrounds is briefly discussed and is focused on the environment more than the intricacies of playground design pertaining to dynamics of play. Whitebread's results of the value of play are extremely important in demonstrating the social role of playgrounds and I will later use this research to support my argument. Nonetheless, this research does not discuss in detail the powerful role of play within playground settings, nor does it focus on play related to social exclusion at playgrounds.

While a great deal can be learned from the research mentioned above, there still remains a knowledge gap of viewing playgrounds as both political and technical spheres and the resulting marginalization of users that occurs within localities, particularly Charlottesville, VA. I will use parts of the aforementioned research to support my argument that Charlottesville playgrounds are

socio-technical in nature and prove my claim through the unique framework Technological Politics. By using this framework, I will unveil the profound social and politics impacts playgrounds have on the members of the Charlottesville community.

Conceptual Framework:

The political facet of Charlottesville playgrounds can be methodically analyzed using the framework Technological Politics. Developed by Langdon Winner, Technological Politics points out the importance of considering how technologies, typically, don't only serve their technological purpose, but also have the capacity to structure and feed power dynamics (Winner, 1980). As defined by Winner, politics are "...arrangements of power and authority in human associations as well as the activities that take place in those arrangements" and technology is "all of modern practical artifice, but to avoid confusion I prefer to speak of technologies, smaller or larger pieces or systems of hardware of a specific kind (Winner, 1980, p.123). Furthermore, Winner outlines two types of interpretations of how artifacts, i.e., technologies, can have political qualities. The first instance is

> "... in which specific features in the design or arrangement of a device or system could provide a convenient means of establishing patterns of power and authority in a given setting. Technologies of this kind have a range of flexibility in the dimensions of their material form (Winner, 1980, p. 134)."

Whereas the second instance is "...ways in which the intractable properties of certain kinds of technology are strongly, perhaps unavoidably, linked to particular institutionalized patterns of power and authority" and these technologies are "inherently political technologies, man-made systems that appear to require, or to be strongly compatible with, particular kinds of political relationships (Winner, 1980, pp. 124-134)." For this paper, the technology is Charlottesville

playgrounds, and the political qualities are the shaping of power dynamics among the community via user exclusion. Technological politics also utilizes "...characteristics of technical objects and the meaning of those characteristics" to understand the integration of the technical and social spheres (Winner, 1980, p.123). Ground surface material and play features are the two "characteristics" I will analyze for the Charlottesville playgrounds and the "meanings" of these characteristics are the exclusion of users and the subsequent consequences. This framework is important because it reveals that "... the adoption of a given technical system unavoidably brings with it conditions for human relationships that have a distinctive political cast… (Winner, 1980, p. 128)." Through analyzing the two aforementioned characteristics of playground elements, I will demonstrate how Charlottesville playgrounds impact power dynamics, including the formation of relationships and division among society, within the community by marginalizing users with disabilities.

Analysis:

Charlottesville playgrounds marginalize users through various manners. This paper focuses on only two "characteristics" of the technology: ground surface material and play features. Charlottesville zoned playgrounds will be viewed through Winner's first interpretation of an artifact with political qualities in which "...the invention, design, or arrangement of a specific technical device or system becomes a way of settling an issue in a particular community." In this case, the "issue" is a space for play, and it is critical to understand its social impacts on users (Winner, 1980, p. 123). The following paragraphs analyze the two "characteristics" for each of the 13 playgrounds located within Charlottesville to demonstrate the political facet of these playgrounds. The raw data of the Charlottesville parks Spatial Analysis

Scorecard report is used as evidence for analysis. Each park report can be seen in Appendix A (Jiang et al., 2018).

Ground Surface Material

Charlottesville playgrounds exclude users with disabilities through the selection and utilization of inaccessible playground surface materials. Ground surface material is a crucial component to playgrounds as it determines who is able to traverse the playground floor and ultimately use the playground. There are various types of playground surfacing materials which include: mulch, rubber, sand, turf, and more. Of the 12 Charlottesville parks, 10 of the parks contain playgrounds with loose filling. Loose filling contains unfixed pieces of material and is not compact into a flat, smooth surface. The playgrounds at Azalea, Green Leaf, Jordan, McGuffy, McIntire, Northeast, Riverview, Rives, Tonsler, and Washington parks all have mulch flooring. Since mulch is an uneven surface, it is more difficult for an individual to navigate than other flat, smooth surfaces. Further, this surface acts as a barrier to users who require the assistance of mobility devices, as it is difficult for wheels, poles, and other mobility devices to adequately function on the bumpy, flexible, and sometimes deep, surface. Loose fill surface materials like mulch are not typically recognized as American with Disabilities (ADA) approved materials, which are the national regulatory guidelines for playgrounds (United States Consumer Product Safety Commission, 2018). Some Charlottesville playgrounds, in addition to mulch surfacing, have greater surface

Figure 1
Jordan Park Playground Surface

Note: The playground surface is mulch and there is a 4" drop into the playground.

barriers that prevent users to even enter the playground. The Azalea, Jordan, Northeast, Tonsler, and Washington (lower) park playgrounds all have curbs around the playground that have drop depths of 1-5inches, as shown above in Figure 1. These borders act as a wall, prohibiting users with mobility issues from entering the playground safely and independently. As displayed in Figure 2, Forest Hills Park and Pen Park have rubber flooring which is a completely accessible playground surface material. This unitary surface ensures individuals of all abilities can easily and independently maneuver through the playground floor. Although a ground surface material is a physical barrier, it also represents numerous social barriers. Playground floors are spaces where individuals freely and independently explore and socialize. This includes meeting and forming new relationships, learning from peers, and building a sense of identity. Yantzi et al. supports similar findings of social impacts in that

Figure 2
Pen Park Rubber Playground Flooring

> "... playgrounds provide opportunities for the development and maintenance of: fine and gross motor physical skills, physical stamina; and social interactions. They constitute spaces where children learn to share, work collaboratively, be empathetic to others, and take responsibility for their actions. Through active trial and error, they develop cognitive, creative sensory, problem solving and perceptual skills (Yantzi et al., 2010, pp. 65-66)."

Pen Park and Forest Hills Park contain the only two playgrounds within Charlottesville that provide users with disabilities and mobility impairments the opportunity to employ such powerful social aspects of parks. The remaining 10 parks in Charlottesville only permit able-

bodied users to have full, unrestricted access and use of playgrounds and the social benefits. Access to playgrounds is especially important for younger individuals as playgrounds are spaces of growth and learning and according to Yantzi et al., such "learning environments are often the spaces through which children become aware of and begin producing social identities that circulate through broader social space (Yantzi et al., 2010, p. 66)."

Overall, the majority of Charlottesville playgrounds restrict select users from having the opportunity to take advantage of and benefit from communal playground environments. Only two playgrounds allow users with disabilities to reach the playground floor; this creates a powerful divide within the community as some members are not capable of participating in communal social experiences and lack the developmental benefits that result.

Through ground surface material selection, users can be excluded from parks and playgrounds since certain materials, like mulch, can create physical barriers that prevent entry for users with disabilities. One might argue that the City of Charlottesville acknowledges and addresses ground surface material concerns regarding accessibility at parks and playgrounds. In 2013, the Charlottesville set out to complete an "ADA Transition Plan" and in the report outlined design renovations to address issues of park and playground accessibility ("Americans with Disabilities Act Transition Plan", 2013). Yet, accessibility was only considered for park trails and pathways. For example, the report notes how for McIntire park there are plans to create "An ADA compliant paved trail system …" or how a renovation needs to be completed to create a pathway with a "…more accessible grade…" at Greenbrier Park ("Americans with Disabilities Act Transition Plan", 2013, pp. 22-34). However, Charlottesville fails to address playground accessibility in terms of ground surface material for the actual playground floor space. It is imperative that Charlottesville recognize ground surface material as an exclusionary accessibility

design feature of parks not only when applied to trails or pathways, but also to playgrounds. Accessible ground surface materials are essential for Charlottesville park users to not only reach the playground, but also have the ability to maneuver throughout the playground space.

Play Features

It is vital to understand that exclusion of users via entry boundaries are not the only impediment posed by Charlottesville playgrounds. Additionally, the play features of playgrounds can be sources of ostracism. Able-bodied users generally do not face any challenges with typical playground equipment that require the use of stairs, climbing, upper body strength, exertion of muscles, or body coordination. In many instances, users with disabilities are unable to tackle such playground equipment and either cannot use the play feature or require assistance. Inclusive play features, which are both accessible and usable, are vital for a playground to minimize exclusion of users. Ripat and Becker support the necessity of accessibility and usability for play features as their results concluded that

> "…although many playgrounds were described as having one or more accessible features, they were not necessarily usable.... For instance, participants described how play structures were not able to be used in a functional way in situations where a ramp might exist, but there were no play opportunities at the top of the ramp (Ripat & Becker, 2012, p.148)."

Of the 13 Charlottesville playgrounds, 5 playgrounds have no inclusive play features (not including swings). Therefore, all the play features are either too high off the ground, specifically for wheelchair users, or are inaccessible due to structures that require climbing, stairs, or spaces conducive to only able-bodied users, as displayed below in Figure 3. Greenleaf, McIntire,

Northeast, River View and Washington (upper) parks are the 5 playgrounds that have no inclusive play features. Since approximately 40% (5/23) of Charlottesville playgrounds have no inclusive play components, if a user with disabilities is in a position to reach the playground floor, he or she will have no options of independent play and will not be able to participate in activities with other users without assistance. Playgrounds are spaces designed for play, especially independent play where individuals, particularly children, can play without adult interaction. As supported by Kenneth R. Ginsburg since "When play is allowed to be child driven, children practice decision-making skills, move at their own pace, discover their own areas of interest, and ultimately engage fully in the passions they wish to pursue," whereas, "... when play is controlled by adults, children acquiesce to adult rules and concerns and lose some of the benefits play offers them, particularly in developing creativity, leadership, and group skills (Ginsburg, 2007, p. 183)." The remaining 8 playgrounds, generally, have less than a couple inclusive play features which are typically a steering or spinning wheel, gears, or an instrument(s). Forest Hills, Jordan, and Washington (lower) park playgrounds have only one inclusive play feature. Whereas, Azalea, McGuffy, Pen, Rives, and Tonsler park playgrounds have the greatest quantity and variety of inclusive play features. However, these playgrounds still only contain a maximum of a few features. These features, respectively, include: music key notes, bongo drums and steering wheel; interactive play structures like games and swivel structures, as seen below in Figure 4; inclusive features that encourage independent play;

Figure 3

McIntire Park

Note: The playground has no inclusive play structures.

bongos, steering and spinning wheels; plastic play storefront, gears, an instrument, and a steering wheel. Overall, the variety of inclusive play structures among Charlottesville playgrounds is extremely limited and the features that are at the disposal of users have restricted function and use. For example, steering or spinning wheels have minimal play functionality. Over half of Charlottesville playgrounds have one or fewer inclusive play elements which leads to further exclusion of select users. This is because these users are unable to participate in many of the activities and experiences provided by playgrounds. Furthermore, these users cannot equally interact with other able-bodied individuals who use the entirety of the playground and its various play features as they please. In accordance with Dr. David Whitebread et al., it is important for playgrounds as play spaces to have ".... access to a variety of materials and toys…" as it "...is related to children's cognitive development (Whitebread, 2012, p.27)." Further, Whitebread et. al states

Figure 4

McGuffy Park Playground

Note: The playground has various inclusive play structures.

> "... it is well established that materials and toys support play most effectively when they are open and flexible and provide children with a wealth of opportunities for creativity, for social interaction with their peers and adults, for authorship and for deep engagement (Whitebread, 2012, p.27)."

The types of play elements that are available are just as important as the quantity of elements. Users benefit from varying sensory and motor experiences provided by diverse play elements which is demonstrated to be a rarity among Charlottesville playgrounds.

Of paramount importance, both ground surface material and play features must be considered when examining the political power of Charlottesville playgrounds. Forest Hills Park and Pen Park are the only playgrounds with unitary surfacing. Forest Hills playground has one inclusive play feature, and the Pen Park playground has a few inclusive play features. Therefore, Charlottesville only has two viable options for users with disabilities and even these options are severely limited in their play opportunities.

As previously illustrated, the Charlottesville playgrounds are exclusive to select users. These users are not only physically prevented from utilizing these communal spaces, but are also unable to benefit from the social, mental, health, and developmental impacts provided by and within these areas. Due to the lack of inclusion, these users are alienated from the community and the right to use and enjoy such communal spaces is taken away from them. This divides the community significantly and shapes relationships and dynamics of members of the community. However, it is extremely important to acknowledge that this technology, as seen through Winner's framework, is "flexible" and, therefore, the technology's (Charlottesville playgrounds) "...consequences for society must be understood with reference to the social actors able to influence which designs and arrangements are chosen (Winner, 1980, p.123)." Thus, Charlottesville playgrounds have political roles within the community tied to design features of the playgrounds, which the City of Charlottesville has the capacity to change as a means to diminish the neglect of select users and equalize power dynamics.

Conclusion:

Charlottesville playgrounds are socio-technical in nature, as I have shown through the lens of Winner's technological politics. The technological "characteristics" of Charlottesville playgrounds, ground surface material and play features, shape which users can access, utilize,

and participate in play at the playground. The selection of loose filling ground surface material and the limited, a few or less, number of inclusive play features exclude users with mobility impairments and disabilities from accessing and utilizing these spaces. As a result, these users cannot reap the plethora of mental, physical, social, and developmental benefits provided by playgrounds. Consequently, these marginalized users become alienated from society and lack the ability to connect and grow with the community. It is crucial for readers to understand both the technical and social natures of playgrounds. Otherwise, the marginalization of users will continue, potentially worsen, and deepen the social and political disparity between community members. The localized focus of this paper, which draws on broader themes, could be of real value for the City of Charlottesville for raising awareness within the community and also shaping the locality's approach to playground design renovation and creation in the future. Further, this paper could help alert the City's engineers on which stakeholders should be interviewed and what input would be important to collect to create a playground space that provides equal opportunities for individuals of all-abilities.

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Appendix A:

Charlottesville Playground Spatial Audit Scorecards

Azalea Park: F

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	60
Accessibility to Playspaces	50
Play Structures	16
Facilities/ Amenities	75
Maintenance	100
Total	52

Roots and mud make on-site trail inaccessible

Though on mulch, there are two inclusive play components: music key notes and bongo drums

Paved, relatively flat pathways at park

"Typical" playground structure

Successes

Parking at Azalea Park was accessible, with two separate parking lots and a relatively flat grade throughout. There were five ADA spaces, with accompanying access aisles; walkways at grade were immediately adjacent to these spaces. There are also swaths of open fields that could be accessible, such as the area by the dog park.

Challenges

Despite being one of the larger parks in Charlottesville, Azalea Park faced some issues with access to some of their distinct features. The basketball court, which could be considered one of the more inclusive spaces as paved, open space, lacked a path to the area. The park is also connected to the Rivanna Trail, which was highly inaccessible with overgrown tree roots, steep inclines, and mud.

Out of Azalea Park's two separate playgrounds, its independent structure was limited to one wall of sensory material, which included drums and musical key notes. We considered the other structures to be too tall for a user in a wheelchair, so the steering wheel and spinning wheel did not count towards this. Each playground had a plastic curb around the perimeter, with a ramp leading into the playspace. However, the ground material is mulch which could be inaccessible.

6

Forest Hills Park: C

Park Feature	Score
Parking	60
Pathways	75
Additional Structures	60
Accessibility to Playspaces	100
Play Structures	33
Facilities/ Amenities	100
Maintenance	100
Total	70

The pavilion

Water play space

Accessible basketball court

Successes

This park has a water playspace that is accessible on grade from the pathway and has a hard ground surface, making it an excellent place for a young child with disabilities to play. It also has a basketball court which is accessible by ramp as well as two pavilions, each with six accessible picnic tables. Its two playgrounds are adjacent to each other, are accessible from the pathway at grade, and have a firm rubber ground material. They also each have an accessible swing set and one has an interactive play feature at ground level.

Challenges

The parking at Forest Hills is problematic as there is only street parking available and neither designated ADA space has an access aisle. Both are near a curb-cut ramp, but the curb cut on Forest Ridge Road has a 1-inch lip above the grade of the street, and the slope of the curb cut on Forest Hills Avenue are slightly too steep. The ramps connecting to Forest Ridge Road are mostly acceptable, but the concrete is lifting up on one portion, creating a lip and the ramp is slightly too steep in some parts. There is also a large, open field, but it would be nearly impossible for a child in a wheelchair to access due to its location. Moreover, while the playspaces have independent structures, there are too few of them.

8

Greenleaf Park: 49

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	1/5
Accessibility to Playspaces	50
Play Structures	0
Facilities/ Amenities	50
Maintenance	50
Weighted Total Score	49

ADA-Compliant Parking

Varying accessibility of play

No Inclusive play structures

Splash pad & Water Features

Successes

There are two ADA-designated spaces at this relatively small neighborhood-scale park, with nearby pathways that are relatively flat, concrete & well maintained. The basketball court lacked a proper designatied pathway to the paved court survace, and the nearby water features & splash pads were easily accessed, and on-grade with the pathways. This area would also be inclusive due to the open space and opportunity to maneuver within the space and interact with other children. The park also contained two "accessible" swings. Bathroom facilities were ADA compliant, and well maintained, with ample space to access drinking fountains as well.

Challenges

The playground did not contain inclusive play structures. Benches and picnic tables did not facilitate proper ADA use, but would provide a clear viewing space for parents to observe their children.

10

Jordan Park: F

Park Feature	Score
Parking	40
Pathways	75
Additional Structures	100
Accessibility to Playspaces	33
Play Structures	16
Facilities/ Amenities	0
Maintenance	50
Total	32

Traditional, inaccessible playground set

Barrier: playspace boundary drops

Steering wheel is the one accessible play component

Basketball court has a steep slope down towards the open field

Successes

The key asset of Jordan Park would likely be the creek and the adjacent open space. However, if a limited mobile individual does not live in the neighborhood, the challenges of accessible parking and limited amenities may pose as a barrier that outweighs the benefits of the park. The one independent play structure was a steering wheel attached to the playground. However, it is questionable whether it would be worth it to even enter the playground, which has a four-inch drop, to play with this one steering wheel.

Challenges

Jordan Park is a small neighborhood park, south of the Downtown Mall. Because it is a small neighborhood park, there was no separate parking lot. On-street parking can be found on 6th Street at the entrance of the park, or on Rougemont Avenue, though the back trail through Rougemont is not paved. With the on-street parking, there were no spaces specifically allocated for ADA use.

11

McGuffy Park: F

Park Feature	Score
Parking	0
Pathways	100
Additional Structures	25
Accessibility to Playspaces	100
Play Structures	33
Facilities/ Amenities	50
Maintenance	100
Total	66

Basketball court

Successes

Despite the park's limited area and lack of parking spots, this park is equipped with several well built playing structures and a small basketball court as well as long tables. Small flat lawn make it possible for children to play.

Inclusive playing structures

Challenges

The size of of the park is small because is near the center of downtown, so there is no parking lot and cars have to park along the street or the garage several blocks away.

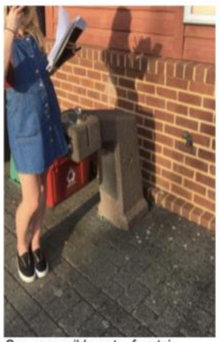
13

McIntire Park: 54

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	100
Accessibility to Playspaces	67
Play Structures	0
Facilities/ Amenities	75
Maintenance	100
Total	54

Mulched trails near pavilions

No Inclusive play structures



One accessible water fountain

Successes

There are five ADA-designated spaces at this large community park, with nearby pathways that are relatively flat, wide, concrete & well maintained. Four of the five baseball fields had a proper designatied pathway to the dugout area. Major public features available include: The main pavilion; well maintained, on grade with path, multiple accessible entrances. The secondary pavilion was small, requiring one to step down to enter from the pathway, and was located down a steep hill, would need to be accessed by car as a wheelchair could not navigate the grade of the slope leading to the pavilion. Bathrooms were spacious and ADA compliant. In the secondary parking area by two baseball diamonds there was an ADA compliant drinking fountain.

Challenges

The playground did not contain inclusive play structures. The play structure was primarily vertical and did not offer many interesting or fun aspects on the ground level. Assistance would be a necessity in order for a child with mobility challeneges to access the structure. The trail is poorly maintained, very steep, not paved fully, and would pose a major risk to a wheelchair user. There was no water fountain present at the main pavilion.

14

Northeast Park: F

Park Feature	Score
Parking	0
Pathways	75
Additional Structures	25
Accessibility to Playspaces	33
Play Structures	0
Facilities/ Amenities	0
Maintenance	50
Total	24

Inaccessible to the play structures

Bus stop next to the park

All playing structures are not inclusive

Successes

The Northeast park is a park in the community without extra parking space. However, the CAT bus station is right next to the park, which could be another choice in the future if public transportation would improve its accessibility facilities and services.

Challenges

There are several play structures but accessing to all the play structures needs assistance, and the area of play structures are surrounded by steps which are normal for ordinary people but barriers for wheelchairs.The key assets of Davis field are its location close to the public transportation, but buses in Charlottesville are not accessible for wheelchairs at present. We believe that public transportation in the future would also develop to be more inclusive and accessible.

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Pen Park: C

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	63
Accessibility to Playspaces	100
Play Structures	33
Facilities/ Amenities	100
Maintenance	100
Total	79

ADA parking spaces to the playground

Flat lawn, overall nice environment, high quality of maintenance

Inclusive swings with accessible ground material

Successes

Although the Pen park is mainly a golf course, there is a very nice playground. The material of the playground is rubber, so that children would not become hurt if they fall downthe rubber ground cover allows for easy maneuverability for those in a wheelchair. There are two ADA parking spaces, and paths from the parking lot to the playground are accessible. Restrooms are ADA-compliant and there is enough room for additional persons if necessary. Pen park is popular among locals due the quantity and variety of existing play structures. Additionally, the park environment and facilities are well maintained and provide an enjoyable experience for those visiting.

Challenges

There are few inclusive features that promote independent play for children of varying abilities, and most play structures require additional assistance in order for someone with limited mobility to interact with the playspace.

The existing open, flat space is currently utilized as flexible recreational space, however the open field provides an excellent opportunity for future improvements. The park's current popularity can only be increased through the addition of features that will be inclusive and engaging to all users.

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Riverview Park: F

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	100
Accessibility to Playspaces	50
Play Structures	0
Facilities/ Amenities	0
Maintenance	50
Total	39

Inaccessible play components on mulch

Inaccessible swing set with mulch

Main attraction of Riverview Park is the trail, which is accessible

Inaccessible play components on mulch

Successes

The key asset at the park is the Rivanna Trail, running along the water. The trail at Riverview is a prominent feature of the space and what most users of the park come to enjoy. We found this key asset to be generally accessible, with relatively flat, paved pathways. Both types of users could come to Riverview Park to enjoy a nature-immersive experience.

Challenges

Parking at Riverview Park was limited to one ADA space and access aisle. This could be seen as an unwelcoming barrier. Handicap permits are received for a variety of reasons, not just for wheelchair users. With just one space for a large park, more than one handicap permit user could not easily be at the park. Otherwise, the parking spot is sufficiently accessible, positioned right by the entrance to the park walkways. Riverview Park was lacking in inclusive play structures, with no structures that could have been used independently. However, there was a small swath of relatively flat grass beside the playground, that could have allowed for play. However, this would depend on the conditions; for example, this would quickly become inaccessible if it were muddy.

Rives Park: F

Park Feature	Score
Parking	60
Pathways	75
Additional Structures	100
Accessibility to Playspaces	50
Play Structures	33
Facilities/ Amenities	50
Maintenance	100
Total	54

Open grass feild

Inclusive swing

Basketball court

Successes

Rives Park has two playgrounds, an open grass field, and a basketball court. All of these spaces are accessible from the main asphalt pathway which is, with the exception of two locations, relatively flat throughout. The playgrounds have a round "nest swing" on which a child with limited mobility could lie down in order to swing. They also have a series of interactive components at ground level including bongos, a steering wheel, and a spinning wheel.

Challenges

The parking lot provides two ADA designated spaces, but the grade is too steep at these spaces. There are also two pavilions accessible from the main pathway, but these are filled with picnic tables that do not have accessible seating. The playspaces are elevated above the pathway, and they are accessible by plastic ramps, but both ramps exceed the maximum allowable slope. Moreover, both playgrounds have mulch as a ground surface, and while they do provide inclusive play components, there are not enough of them and the ones that are there provide limited opportunity for play.

Tonsler Park: F

Park Feature	Score
Parking	60
Pathways	100
Additional Structures	100
Accessibility to Playspaces	50
Play Structures	50
Facilities/ Amenities	50
Maintenance	100
Total	61

The water playspace

Successes

Tonsler Park features a water playspace that is accessible at grade from the main pathway and also has a firm ground material. It also has a large basketball court and a large, relatively flat open grass field, both of which are accessible from the main pathway. The playspace has an accessible swing, a small open play area underneath the main structure consisting of two benches and a plastic play storefront, and a series of small interactive components consisting of gears, an instrument, and a steering wheel.

Inclusive swing

Open grass field

Challenges

There is one ADA designated space, but the cross slope at this area is steeper than the allowable maximum slope. The curb-cut ramp is also steeper than is allowable and does not have a properly configured landing. The playspace is problematic as it has a mulch ground surface and a 3-½ inch drop into the space. Its accessible play components also provide limited opportunity for play.

Washington Park- Upper: F

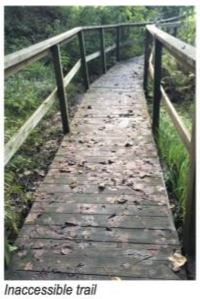
Park Feature	Score
Parking	80
Pathways	50
Additional Structures	80
Accessibility to Playspaces	100
Play Structures	0
Facilities/ Amenities	100
Maintenance	50
Total	46

Vertical Play Structure

Successes

The park's infrastructure including sidewalks, ramps, and entrances to facilities are relatively well maintained. The parking lot contains 4-5 designated spaces on the street adjacent to the pool entrance. The designated spots are located on a side street near the poolhouse entrance. This may become problematic for easy loading and unloading of vehicles. The upper park contains a variety of features including a pavilion, swimming pool, playground, and field. The basketball court and pavilion are accessible to all. A gentle-sloping grassy area adjacent to the pavilion that can be accessed via the ramp to the pavilion. The pool contains two apparatuses that would allow those with mobility limitations to play in the water among other children.

Well-maintained pathway



Inaccessible trail

Challenges

Areas of vegetation overgrowth into path area may act as a barrier to wheelchair use of the trail. There is a steep, paved path leading from the parking lot to the upper park that would be difficult to maneuver with a wheelchair. There are no inclusive/ accessible play components as the play structure is primarily vertical in nature. The swing set and playground have a mulched ground surface that prohibit children in wheelchairs or walkers from easily accessing the play structures. The grassy area by the pavilion does not provide enough room for running games with a power wheelchair, thus limiting children-from playing together. The trail on the site is inaccessible for users in a wheelchair.

Washington Park-Lower: F

Park Feature	Score
Parking	100
Pathways	100
Additional Structures	60
Accessibility to Playspaces	50
Play Structures	17
Facilities/ Amenities	50
Maintenance	50
Total	41

Tic Tac Toe board

Successes

The park contains a baseball diamond, open athletic fields, a pavilion and playground. The parking lot has one designated ADA parking spot with a curb ramp adjacent to the parking spot. There are large, open fields are adjacent to parking lot and on grade with lot. The grassy field could provide a space for children of varying abilities to run freely and play together. The playspace contains an interactive tic-tac-toe board that could be engaging to all users. There are nicely paved paths leading to the baskeball court, playspace, and pavilion.

Route from parking to basketball court

Poor access to baseball diamond

Challenges

The playground is approximately 500ft from parking lot which could act as a barrier of entry to that playspace depending on the age and ability of the child. There is also a 4-5 inch drop into the mulched ground playspace that poses a risk to wheelchair users. The baseball diamond is accessed via a paved pathway, however the route to the grand stands is an uneven dirt path. There are no bathroom or drinking fountain facilities in the lower park. The nearest restrooms are in the pavilion of Washington Park-upper.