GEORGIA INSTITUTE OF TECHNOLOGY

Using public spaces freely

Ownership and management of public spaces

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Chess players in Woodruff Park. Photo by Allison Buchwach

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Introduction

Several interpretations exist of what it means to be a public space and the purpose of such spaces. One interpretation focuses on the legal and political interpretation of public space, which relates to who has a right to a space and the rights one has in that space. Frequent debates over public space in this regard often consider freedom of speech and assembly and the way in which law may try to exclude certain users of space such as the homeless. Another interpretation of public space is its purpose to serve the public realm as a place where one can protest, converse and debate with fellow citizenry, and otherwise maintain civic-mindedness. The space is a level playing field and the physical space where democracy can be preserved. Lastly, public space can be interpreted as having primarily a social and psychological function through its place in the larger urban setting that allows people to interact and have a sense of identity and community, which relate to other social phenomena such as safety and mental well-being (*Common Ground? Readings and Reflections on Public Space*, 2010).

The purposes of this option paper are to consider the ownership and management schemes over spaces intended for public use and assess how those schemes influence a space's ability to serve the public. A space is more public when it can be freely accessed and its users are allowed to engage in their own preferred activities and interactions with one another. As defined by Jeremy Nemeth, "public" spaces are spaces that "ideally… serve as the material location where social interactions and the public activities of all members of the public occur" (Nemeth, 2009). Varna and Tiesdell use the term "publicness" as the ideal

public space, which is "a place that is more public for more publics" (Varna & Tiesdell, 2010). I add to this definition of "publicness" that space should not simply permit inclusivity, but proactively welcome inclusivity of all different members of the public and help facilitate social interaction and activities characteristic of diverse users. Thus, the approach of this research paper favors the political and legal interpretation of public space and looks to make conclusions that can better serve non-excludability of both diverse users and the public activities they wish to engage in. In light of this observation, public space shall be inclusive of spaces that are intended for use by the broader public, such as plazas, pocket parks, open air markets, town squares, and sidewalks. The paper will conclude with recommendations on how public space can offer the most accessible environment possible for any member of the public and for their public activities, regardless of its ownership status or control by a private entity or by local government.

This exercise is important as many scholars have observed that public spaces owned by local governments are being transferred to private ownership and operation. Or, the development of public spaces and their operation are becoming the responsibility of private entities altogether as local governments find the advantage of reduced costs and private entities gain some kind of benefit. Those concerned with the degree of publicness of a space may care to know how publicness is affected when different ownership and management schemes are compared. While it is perhaps obvious that privately funded, developed and managed may create less public spaces, it is important to know which factors contribute to or take away from publicness in order for policymakers and advocates to decide whether the development and management of public space should be the

responsibility of the private sector, or, if it is, then how the private sector can best be regulated in order to preserve publicness.

The following literature review is guided by four primary questions that inform the major research question. Part of the literature review shares selected models and the methodologies used by scholars that will help shape the methodology for the author's field research. The literature review will conclude with areas for further research and how the investigation of public spaces in Atlanta may add to existing literature.

Literature Review

Questions for literature review

In order to assess the major question of how alternative ownership and management schemes influence the extent to which public space meets the goal of publicness, this literature review explored four primary questions:

1. What indicators have been developed to assess the publicness of space?
2. What legal standards of publicness exist for public spaces?
3. What scholarly models exist and what parameters do they use to measure publicness?
4. When applying models for publicness, how do design and operation of public space compare or contrast when under alternative schemes of ownership and management?

What indicators have been developed to assess the publicness of space?

To assess the publicness of space, a common approach is to analyze the space's various characteristics and components. Scholars and practitioners have identified specific features that are desirable when the goal of the public space is to be accessible and inclusive. Some of these indicators are harder to observe in a quantifiable manner because of the difficulty in measuring design and the social experience of a public space. However, particular variables for a good public space – or a space that is inclusive and accessible – seem to reappear across the literature, which are presented here. These indicators can be categorized into design and managerial.

Design indicators

Design indicators include the physical features of a public space. These features are decided during the design phase of the space and are usually permanent. Design determines a space's accessibility and desirability for its visitors and can also have implications on adaptability to programming or activities. Spaces can be designed to intentionally encourage or discourage access for certain types of users. They can also hinder use of a space altogether, for example, by having little or no sun exposure due to orientation. Several common indicators for measuring publicness through design are found in the literature (Hedman & Jaszewski, 1984; Kayden, 2000; Melik, Aalst, & Weesep, 2007; Schmidt & Nemeth, 2010; Varna & Tiesdell, 2010; Whyte, 1980; Williams, Liebermann, Edwards, Switzky, & Sokolowsky, 2008):

- Scale and dimension
- Orientation: sunlight, microclimates
- Permanent amenities: seating, lighting, public art, restrooms, shelter, landscaping

- Signage: signs that display rules, space ownership, how to access the space
- Access: indoors v. outdoors, level, space entry, visual access

The indicators listed can either enhance or detract from a public space. A space's scale and its dimensions do not typically have proscribed ideal dimensions by themselves. Rather, their characteristics rely on the built environment surrounding it, which makes them sensitive components of public space. For example, a very large space, such as the Plaza del Campo in Italy that has an area of approximately 55,500 square feet, is very successful due to the dense, multistory buildings that surround it. A plaza of similar dimensions can fail, however, when its surroundings lack defining elements and make the inhabitant feel like they are in a sea of open space and disoriented.

Orientation of the space can have an impact on the individual experience by controlling climate in the space. A plaza that is designed so that it can receive sun in the winter and shade in the summer is more desirable than a space that is too cold or warm. Also, access to sunlight allows the space to have natural lighting during the day for better visibility.

Permanent amenities are often positive additions to a public space's design. The presence of seating, lighting, art, restrooms, shelter, and natural landscaping tend to be inviting features when present and less likely to deter users. On the other hand, permanent features of the plaza that could function as both design features and amenities can be made to deter use as an amenity. A common example is to put spikes or mini-fencing along a ledge so that it will not be sat upon.

Especially important in private ownership and management of public space is the presence of signage advertising the space for public use. The design and placement of the signage will have a great impact on whether or not individuals are knowledgeable of their right to access the space. Signs may also have a negative influence in the case that they advertise rules for behavior that is particularly restrictive, or advertise the presence of CCTV security cameras.

The physical design for entering the space is significant because it can also determine how likely individuals will feel welcome or unwelcome. Being easily visible and recognizable as an entrance are important factors. Gates or entrances missing features commonly associated with entrances, such as street-level access or entrance from other public space like a sidewalk or street, easily deter users from entering. The presence of security guards at an entrance can also be unwelcoming and cause confusion regarding the right to use the space.

Oftentimes, varying elements of public space may be favorably designed, however, the absence of other well-design elements could spoil the others' success. Much like baking cookies, some elements are more crucial than others, where forgetting to add baking powder will make cookies less picture-worthy, yet they will still taste good. Forgetting to add the sugar, however, might offend the taste buds. It is the synthesis of the elements that make the space more inviting and accessible rather than making sure isolated parts are thrown into the mix.

Managerial indicators

Managerial indicators are those that control the use of a space in terms of control over accessibility and behavior. They differ from design indicators as non-permanent features that can be adjusted after a space is constructed. The following is a list of indicators for measuring publicness through management (Hedman & Jaszewski, 1984; Kayden, 2000; Melik, et al., 2007; Schmidt & Nemeth, 2010; Varna & Tiesdell, 2010; Whyte, 1980; Williams, et al., 2008):

- Hours of operation
- Presence and aggressiveness of security: guards, CCTV
- Non-permanent amenities: programming activities, food vendors, public art
- Compliance with local laws for public spaces

The hours of operation will control when users can and cannot be in the space. In some cases, management will close off a public space even when required by law to be open. Another potent factor can be the presence of security guards or CCTV cameras, which often make an individual feel watched and less likely to freely engage in public activities. Guards can also be told by their employers – the owners of a space when privately owned - to control users of space even when not permissible by law. However, the presence of security guards can also make users of the space feel welcome due to the perception of added safety.

Non-permanent amenities can also add to a space's publicness through programming. Programming can include food vendors, public art, musicians, and other organized

activities that tend to draw people. According to theorist William Whyte, food vendors are a great way to draw people and people themselves are a sure way to draw people (Whyte, 1980).

In the case of a public space being privately owned, compliance with local laws for operating public spaces is imperative to the publicness of space as is the enforcement of those laws. However, the laws created by government may themselves not be the most they should to support publicness. Observations of the latter situation will be shared in a later section.

What legal standards of publicness exist for public spaces?

One way in which these indicators have been used to support design and management for publicness is in a city's requirements for the development and management of public space by private actors. Both New York and San Francisco have developed policies that encourage the development of public spaces in exchange for increased floor area ratio (FAR) for their commercial districts. These spaces are collectively referred to as bonus spaces.

New York City developed its first policy for privately owned public spaces (POPS) in its 1961 Zoning Resolution. The resolution defined types of public spaces and their design and management criteria that could be built in exchange for increased floor space in its commercial zones. The resolution was amended in 1975 to add even more criteria to improve the design and management of the spaces to be more inclusive of the public than the ones from the previous decade (Kayden, 2000).

Since 1975, the regulations regarding the POPS include criteria for the space's size, spatial proportions, orientation, grade, seating, trees, other amenities, obstructions, signage, adjoining features, lighting, requirements for disabled access, and management (Kayden, 2000). Requirements for each of these criteria vary depending on the type of public space, including plaza, arcade, urban plaza, residential plaza, sidewalk widening, open air concourse, and others. A selection of space types and their requirements are included in a table in the Appendix.

San Francisco has a similar density bonus policy for its POPS that began in 1968. The policy was inspired by the Transamerica Pyramid building, which had a ground-floor plaza accessible to the public. Hoping to encourage more of these spaces, the San Francisco planning department created density bonuses for buildings that created a public space, however, the results in terms of quality of these spaces produced mixed results. In 1985, the planning department adopted new regulations to produce higher quality POPOS and more of them (Williams, et al., 2008). The new regulations were part of the Downtown Plan, which would mitigate the impact of the office construction on the quality of life for San Franciscans without jeopardizing the city's economic growth (Macris & Williams, 1999).

Compared to the New York City POPS, San Francisco includes many more public space types, including urban garden, urban park, plaza, view and/or sun terrace, greenhouse, snippet, atrium, indoor park, public sitting area in a galleria, public sitting area in an

arcade, and public sitting area in a pedestrian walkway. One reason for the quantity of space types may have to do with their allowance for POPS to be built indoors or on a different level than ground floor. Criteria for the public space include size, location, access, seating and tables, landscaping, commercial services and food, sunlight and wind, and management ("Downtown Area Plan," 1996).

What scholarly models exist and what parameters do they use to measure publicness?

San Francisco and New York City bonus spaces and their publicness have been assessed using qualitative means for many of the indicators described above. These assessments are appropriate for design and management, both abstract concepts that are difficult to quantify. However, when thinking about spaces comparatively, it is useful to have quantifiable measurements of space. A handful of scholars have focused on accomplishing that goal. Two assessment models shared below rely on pictorial representations of the space that attempts to aggregate several indicators. An additional assessment comes in the form of an index and gives a summary score for a space based on scores for a list of indicators.

This research came across two visual representations of publicness for space. Both are multidimensional diagrams that group indicators into subsections that their designers believe have the greatest consequences for users of space. Each applies a numerical value to each indicator that affects the final representation. The subjectivity used in grouping the indicators and their weights leaves room for debate regarding how much consequence each indicator may have on a user's experience.

In the Star Model, designed by George Varna and Steve Tiesdell, indicators are grouped into five dimensions of ownership, control, civility, physical configuration, and animation. Ownership is the legal status of a space. Spaces can fit into six ownership schemes, ranging from the most private space scheme of private ownership and private use, such as the home, to the most public space scheme of public ownership, function, and use, such as a street or square. Ownership schemes in between those two poles categorize different spaces according to who owns the space, the purpose of the space through observation of function, and who is actually using the space.

Control and civility refer to the management of a space. Regarding control, the author is concerned with whether policing of a space is for the protection of the general public or if policing of the space is hired by a private establishment to control specific behaviors antithetical to the private purpose. Civility measures how well a space is cared for. This includes keeping a space physically maintained, but also requires a careful balance of social behavior such that some users of the space use it as they wish without offending another user of the space. This can be users' physical proximity to one another and specific activities that go on with each individual recognizing and adhering to activity or interaction that is "appropriate to share (or impost on one's fellows) and those that are best kept private" (Brain, 2005). A space loses points on civility if its under- or over-management results in some parties feeling comfortable in the space at the exclusion of others' comfort to be in the space, making it less public.

The design of space is taken into consideration by the categories of physical configuration and animation. Physical configuration accounts for how well the space is situated in the context of those spaces around it and how well the space can then be accessed. Indicators of physical configuration include a space's location within the city and how well connected it is to points of interest or activity; visual access or how well it can be seen from the outside; and threshold and gateways that determine how easy it is for a user to enter a space both physically and psychologically. Animation relates to the design of the space itself and how well the space can attract people to it. It is "the degree to which the design of the place supports and meets human needs in public space and whether it is actively used and shared by different individuals and groups" (Varna & Tiesdell, p. 585). Animation includes passive engagement, active engagement, and discovery and display. Passive and active engagement involves consequences of space on opportunities social interaction ranging from people watching to verbal engagement. Discovery is concerned with the potential for spontaneous activity and a level of unpredictability. A person's public image and being able to "be seen" is the display piece.

Each point of the star has two to four sub-indicators that can be given a rating of one to five. Scores for the sub-indicators are subjective and debatable. Characteristics of a space to receive a score of 5 and 1 are the most concrete. However, there are no distinct qualifications to receive a score of 4 or 2, and several sub-indicators do not have scenarios that would give them a score of 3. This contrasts to Nemeth's index, which has an observable circumstance for each score possible.

The average score for each of the five larger indicators, or point of the star, influences the point of the star pulling the point either closer in or further out away from its center. A star with longer limbs, or a fuller star, correlates with more publicness, and shorter limbs, or an eroded star, correlates with less (Varna & Tiesdell, 2010).

Figure 1. Star Model

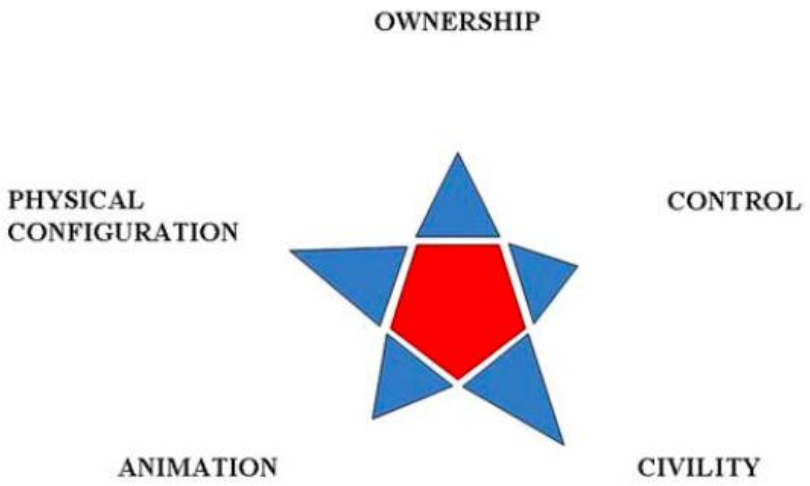


Figure 6. Hypothetical public place scoring more highly on 'design' criteria.

Another visual representation of space based on quantifiable indicators is the six-dimensional profile. The profile is broken down into two major components: indicators that support a secured public space and those that support a themed public space. A secure public space is one that conveys a sense of safety, such as with the presence of security. This also includes features such as difficult or unknown access points to the space and design features that discourage certain sitting, laying down, or otherwise staying too long. Themed public space indicators describe a space's ability to entertain the public and allow

them to engage in something unique from their private spaces. Unlike the other models that measure publicness on a continuum of less public to more public, this model looks at two major tendencies in the design and management of space that both try to exercise control over the user's experience. The model is not intended to be normative; rather, there are advantages and disadvantages to both secured and themed spaces.

The indicators that feed into the model are each scored by low, medium, or high. Instead of making a fuller shape like the Star Model, the six-dimensional profile should be viewed as two poles, and the shape being dragged to either pole determines its publicness. The northern pole represents three indicators that fall into the secured category, including surveillance, restraints on loitering, and rules in the space. The southern pole incorporates three indicators appropriate for the themed category, including programmed events, "funshopping" or shops that are fun in nature, and pavement cafes. The fuller the shape on either pole suggests the space is more secured or themed. The two poles are not oppositional, however. They are "two manifestations of the same tendency toward greater control and predictability of activities in public space" (Melik, et al., 2007).

Figure 2. Six-dimensional Profile

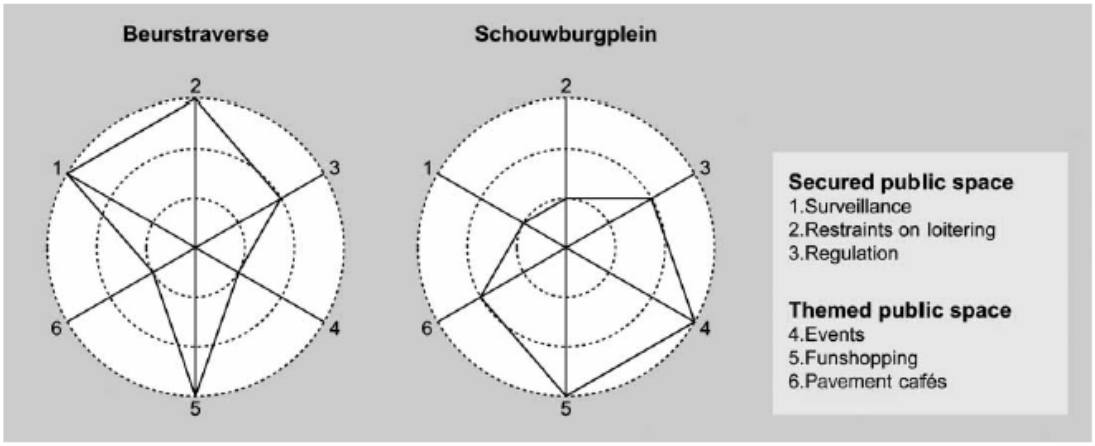


Figure 4. Six-dimensional profiles of the Beurstraverse and Schouwburgplein as secured (upper half) or themed (lower half) public space.

Jeremy Nemeth developed an index of 20 design and management indicators that measure a public space for its degree of behavioral control. Each indicator is given a 0, 1, or 2 with the higher score being characteristic of a more open space, or a space that exerts the least behavioral control. A total score is revealed by subtracting all of the factors considered "control" or less public factors from those factors that are "open" or more public. The total scores can fall from -20 to 20. A negative score suggests a more controlled space while a positive score a more open one. A neutral space will score 0. A principal components analysis on one application of the index showed that the model explained 64.9 percent of the cumulative variance (Nemeth, 2009).

When applying models for publicness, how do design and operation of public space compare or contrast when under alternative schemes of ownership and management?

The models describe above are an important exploration for this research paper in order to compare privately and publicly developed and operated spaces. This section will at the

results of the assessments described above and how much they reveal about this comparison.

The Star Model previously discussed has not had any real-world applications. Its creators feel that were it used, "its chief value is to present pictorially the degree of publicness of one public place vis-à-vis another, and also to highlight areas where the relative publicness is diminished or extended" (Varna & Tiesdell, 2010).

Nemeth applied his index to 163 bonus spaces at 93 buildings in New York City. The average score was 2.93 and the mode was 3. The spaces, on average, were more public. The total range of scores was -6 to 11. This application gives a more concrete understanding of how well a space achieves publicness relative to the range of possible scores of -20 to 20. The hard number score on an index allows the publicness of spaces to be immediately understood by comparing the score to the range of possible scores. This is a better measure than the Star and six-dimensional profile models, which work better for comparison by viewing multiple spaces' pictorial representations side by side. Looking at one pictorial model in isolation of others would not reveal much meaning.

Conclusions

Where research is lacking

The models developed have not had applications in such a way that directly compares publicly versus privately developed and operated spaces. Most of the models tend to assess only those spaces that are privately owned and operated or privately operated.

One study measured six public spaces in New York City, three that were bonus spaces and three that were developed and operated by the city. Miller comes to the conclusion that "corporate interests shape urban spaces in ways that do not necessarily meet the normative ideals of public space. Their privately owned status limits the capacity of the public sphere to press for democratic inclusiveness" (Miller, 2010).

Much has been expressed about privately owned and especially privately managed public space and how that ownership and management structure does not lend itself to publicness. However, we don't know how these spaces stack up against the publicly owned and operated spaces. Many of the critiques of the private ownership and management scheme assume that public ownership and management would make the space more public. However, perhaps the same scrutiny, when applied to *publicly* owned and managed spaces, might reveal a low level of publicness due to the local laws and processes governing design and management. Before critiquing privately owned and operated spaces as not public enough, the alternative of publicly owned and operated spaces should be studied for publicness. A comparison of publicly owned and operated spaces in different cities may

also reveal which cities' laws best serve publicness.

Adding to body of research

This option paper will compare select public spaces in the City of Atlanta, both publicly and privately owned and managed, to come to conclusions on how they differ in terms of meeting the objective of publicness. Use of an index similar to that of Nemeth's will add to the value of his model by finding its strengths and weaknesses through application.

Context of research question in Atlanta

The objective of this paper is to determine whether or not public spaces differ in meeting the objective of publicness when comparing public and private ownership and management. A public space does not exclude or discourage certain members of the public from accessing the space, and meets the public's needs in the space. By studying public spaces in Atlanta, we may be able to discover which, if any, of public or privately owned and managed spaces contribute to publicness and how policy regarding public space may better meet that objective. However, these spaces are subject to Atlanta city laws, and thus it is important to analyze the spaces in the context of the existing laws that control the condition of public spaces. A review of city laws and processes regarding public space development and management helps to understand to what extent local laws may be responsible for any given public space's performance on the index used to assess publicness.

The City of Atlanta's approach to development and management of public spaces can be divided into the categories of physical development and behavioral management. The physical development category includes the pre-construction phase of public and open spaces and includes standards for the space's layout on a parcel. The behavior management category is a post-construction phase of public spaces that describe permissible behavior in public space.

Physical development

Ordinances pertaining to the physical development of public space can be sorted into residential, commercial, and mixed use zoning categories. These categories find their own criteria for public space based on these land uses, with the mixed use category being inclusive of many "special public interest" districts and other districts that have both residential and commercial components within.

Residential

For residential spaces, developments must meet requirements for "useable open space," defined as:

> "Useable open space is part of total open space appropriately improved and located for outdoor living space for residents and for aesthetic appeal. Such space includes lawns and other landscaped areas, walkways, paved terraces and sitting areas, outdoor recreational areas and landscaped portions of street rights-of-way. Such space shall not be used for vehicles, except for incidental service, maintenance or emergency actions." (Sec. 16-28.010, Atlanta City Code of Ordinances)

It is the net area of the lot after the building footprint and paved areas for non-pedestrians are subtracted out of the total lot area. The useable open space is determined by

multiplying the gross land area by the land use intensity ratio supplied by a Land Use Intensity Ratio table. This table is also used to determine the amount of useable open space for mixed use zoning districts that have residential components. A portion of the Land Use Intensity Ratios Table can be seen in Figure 3.

Figure 3. Land Use Intensity Ratios Table

LAND USE INTENSITY RATIOS

LUI Ratios Times *Gross Land Area*

	Floor Area (FAR)	*Total Open Space (TOSR)*	*Useable Open Space (UOSR)*	*Parking Spaces Per Lodging Unit*	*Parking Spaces Per Dwelling Unit*
Sector 1	.100	.80	.65	1.0	2.2
	.107	.80	.62	1.0	2.1
	.115	.79	.60	1.0	2.1
	.123	.79	.58	1.0	2.0
	.132	.78	.55	1.0	1.9
	.141	.78	.54	1.0	1.9
	.152	.78	.53	1.0	1.8
	.162	.77	.53	1.0	1.8
Sector 2	.174	.77	.52	.67	1.7
	.187	.77	.52	.67	1.7
	.200	.76	.52	.67	1.6
	.214	.76	.51	.67	1.6
	.230	.75	.51	.67	1.5
	.246	.75	.49	.67	1.5
	.264	.74	.48	.67	1.5
	.283	.74	.48	.67	1.4
	.303	.73	.46	.67	1.4
	.325	.73	.46	.67	1.3
	.348	.73	.45	.67	1.3
Sector 3	.373	.72	.45	.60	1.3
	.400	.72	.44	.60	1.2
	.429	.72	.43	.60	1.2
	.459	.72	.42	.60	1.2

Commercial

Commercial district requirements for "public space" differ than the useable open space requirements for residential districts. Public space is defined by:

> "For purposes of this part, *public space* shall include both exterior and interior public spaces appropriately improved for pedestrian amenity or for aesthetic appeal and shall not include areas used for vehicles, except for incidental service, maintenance or emergency actions only. Space provided as result of the pedestrian circulation requirement shall be credited to the requirement for public space. Such public space is required at ground level, and buildings may occupy such space above a height of one (1) story." (Sec. 16-28.012, Atlanta City Code of Ordinances)

The requirements are specific to each zoning district and lack design standards other than a minimum percentage of area on the parcel. These types of developments have an application process that goes directly to the building department of the city and are not reviewed by the planning department. (Interview with Boscuñana, April 2012)

Mixed use

Developments that fall within certain zones that have a higher density of users or those that anticipate use by the public, such as the Downtown or Midtown special public interest districts and parcels around the BeltLine, require a Special Administrative Permit from the Planning Department before the development can proceed in the building permit process. This allows the planning department to review the site design and 1) make sure that all open space requirements are met and 2) make sure that the layout of the site has good urban design. If the development falls within a historic district, the design must be reviewed by the Historic Design Review (Interview with Boscuñana, April 2012).

Incentives to encourage open spaces in some districts include counting streets toward the total open space requirement as an effort to increase the cities' street grid connectivity. Some districts also permit indoor atriums, terraces, and balconies to count toward useable open space as long as the spaces are accessible to the general public during regular business hours (Interview with Boscuñana, April 2012).

Behavioral Management

There is a long list of laws that prohibit certain types of behavior in public spaces. A summary list of the kinds of laws that exist and examples is provided below. Several of the behaviors are prohibited but make exception if a permit is obtained.

- Minimize nuisance – no amplifiers, no loud music
- Socially acceptable behavior – no alcoholic beverages, no sleeping
- Safety – prohibition of weapons, no swimming in lakes or ponds, rules regarding control dogs and other pets, standards for large gatherings of people
- No domination by one or few users – prohibition of tents or personal belongings stored in the space, no lying down in sidewalks (Park Use Rules and Guidelines, 2012).

Planning

Another component to understanding the public spaces analysis in the City of Atlanta is and understanding of their goals and objectives for these spaces in their planning documents. The City undertook Atlanta's Project Greenspace in 2006 to grow and manage the greenspace system. The Greenspace Plan incorporates both traditional green spaces such as parks and trails, but also discusses connection of such spaces with parks, plazas,

and streetscapes. This is an important observation as the plan encompasses public spaces generally to serve the City's goal of economic growth by creating "a vision and framework for a world-class system that connects people with great public spaces, nature preserves, parks, plazas, and streetscapes" (Wallace, Roberts & Todd, 2009). The predecessor to this project is the Parks, Open Space and Greenways Plan completed in 1993, and many of the projects from that document were implemented, however, the City did not reached its target goal of 10.5 acres of parkland per 1000 residents in 2009 (Wallace, Roberts & Todd, 2008).

Understanding Atlanta's laws regarding the development and management of public space is useful to comprehend the constraints that exist for developing and managing public spaces. These laws are partly responsible for the scores that the public spaces receive through requirements on behavior in public spaces and, to a degree, lack of design standards.

Methodology

Selection of public spaces

To explore the effects that ownership and management structure can have on the ability to use public space freely, 12 public spaces were chosen from around the City of Atlanta. Six of the spaces are privately owned and managed and six are publicly owned and managed. The spaces were chosen to reflect different geographic sections within the City of Atlanta boundary and are within two miles of Atlanta's major north-south development corridor along Peachtree Street. The spaces are similar in size and typology and are chosen among

hundreds of spaces that could qualify for this analysis. The size of the spaces range from 2200 square feet to 113,900 square feet, and the median size is 19,600 square feet. Both the range of sizes and commercial locations of the spaces were chosen in an effort to compare spaces that are near dense residential or employment populations. Serving high concentrations of people means that these spaces should strive to be highly inclusive as opposed to spaces located in low-density residential neighborhoods, where demand for space and inclusion of different needs or groups are potentially less.

The analysis covers three typologies including park, pocket park, and plaza. The major factor separating the typologies is the surface material and implied purpose of the space. The parks and pocket parks have a majority of their surfaces covered by grass or other vegetative cover. Plazas use concrete, brick, or another hard material for a majority of their surface. The parks assume more of a recreational role, while pocket parks tend to be a visual amenity or a short-term refuge. The plazas seem to cater themselves to lunch-time or other short-term visitors. Some of the plazas have electrical outlets for event programming and thus assume physical occupancy. By contrast, other plazas are more commemorative or monumental for nearby neighborhood or civic associations. This implies that their function is to sustain a memory or convey a message rather than provide space to be occupied by people.

The following table presents the spaces, their ownership and management, typology, and size. A few of the names include “park” in their official title, which for the purposes of this analysis is a misnomer due to their non-vegetative surface materials. The spaces are

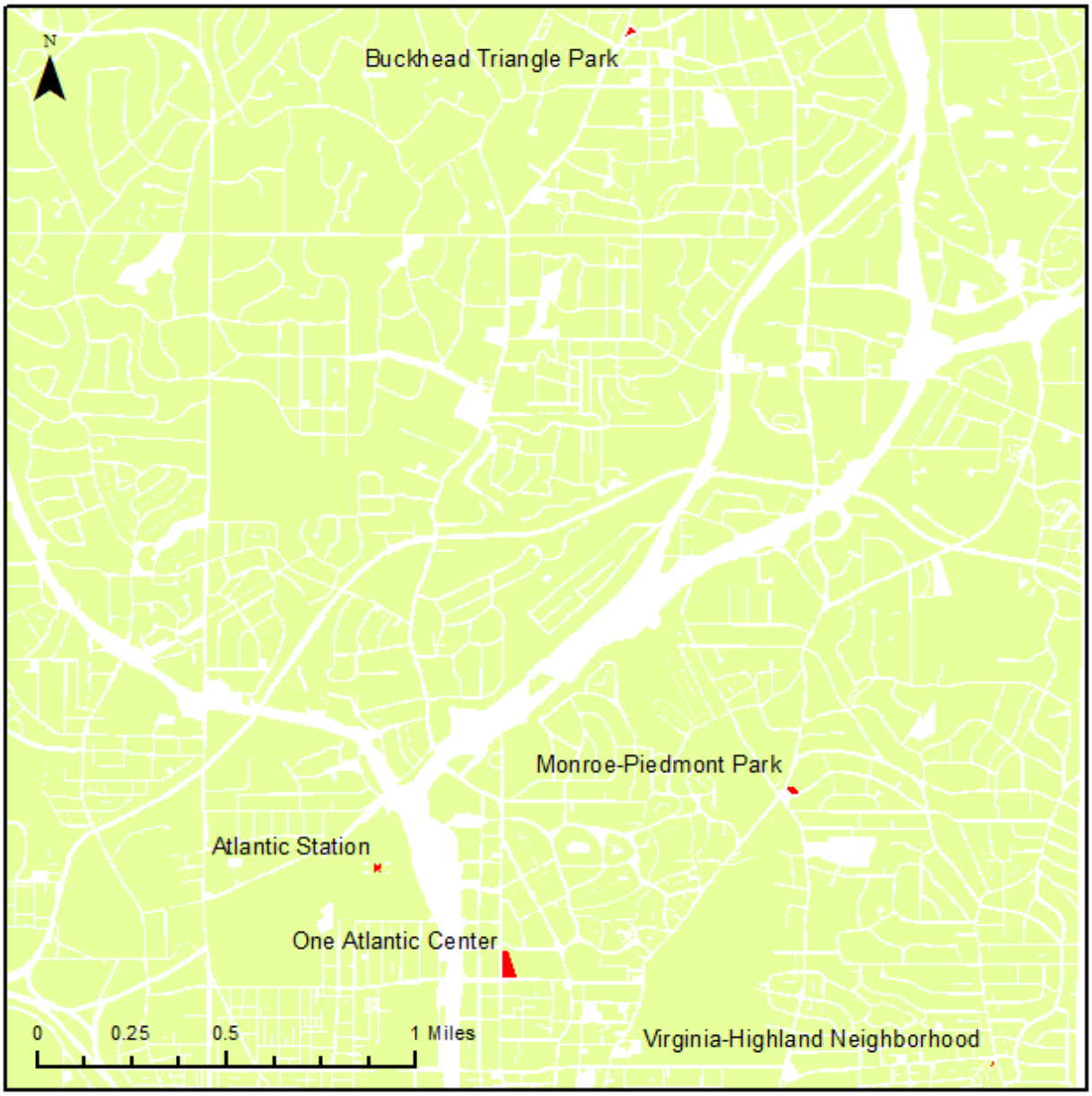
grouped first by typology and then by size in ascending order. The public spaces' locations are shown in Figures 4 and 5 below.

Table 1. Twelve Atlanta public spaces ownership, type and size.

Space	Public or private ownership and management	Typology: park, pocket park or plaza	Size (square feet)
One Atlantic Center	Private	Park	63,300
Woodruff Park	Public	Park	113,900
Glenwood Village	Private	Plaza	6500
Equitable Building	Private	Plaza	7000
Folk Art Park	Public	Plaza	9700
Little Five Points Findley Plaza	Public	Plaza	17,500
Five Points MARTA station	Private	Plaza	18,800
Centergy Plaza	Private	Plaza	20,400
Buckhead Triangle Park	Public	Plaza	27,200
Atlantic Station	Private	Plaza	27,200
Virgina-Highland neighborhood	Public	Pocket park	2200
Monroe-Piedmont park	Public	Pocket park	36,200

Figure 4. Location of seven of the twelve public spaces

Figure 5. Location of remaining five of the twelve public spaces



Index used and adjustments

The twelve spaces were assessed using the index from scholar Jeremy Nemeth described in the literature review section, with minor adjustments. This index was used because of its ability to explain the variance in the observations by 64.9 percent. The criteria used in the index have definitions and associated scores that are concrete and do not leave much room

for the data collector's subjectivity, making the index more universal in application and for comparison of the public space scores. The criteria used and definitions for scoring can be seen in the following table.

Table 2. Index for scoring public space

Features encouraging freedom of use		
Sign announcing "public space"	0	none present
	1	one small sign
	2	one large sign or two or more signs
At a commercial building	0	no office/commercial component
	1	mixed use - residential/commercial
	2	office/commercial component only
Restroom available	0	none present
	1	available for customers only or difficult to access
	2	readily available to all
Diversity of seating types	0	no seating
	1	only one type of stationary seating
	2	two or more types of seating or substantial moveable seating
Various microclimates	0	no sun or no shade or fully exposed to wind
	1	some sun/shade, overhangs/shielding from wind and rain
	2	several distinct microclimates, extensive overhands, trees
Lighting to encourage night use	0	none present
	1	one type or style of lighting
	2	several lighting types
Small-scale food consumption	0	none present
	1	one basic kiosk or stand
	2	two or more kiosks/stands or one larger take-out stand
Art/visual enhancement	0	none present
	1	one or two minor installations, statues or fountains
	2	one major interactive installation; free performances
Entrance accessibility	0	gated or key access only and at all times
	1	one constricted entry; several entries through doors/gates
	2	more than one entrance without gates
Orientation accessibility	0	not on street level or blocked off from public sidewalk
	1	street-level but oriented away from public sidewalk
	2	visible with access off sidewalk (fewer than five steps)
Features that control users		
Visible sets of rules posted	0	none present
	-1	one sign or posting
	-2	two or more signs
Subjective rules posted	0	none present

	-1	one rule visibly posted
	-2	two or more rules visibly posted
In BID	0	not in a BID
	-1	in a BID with maintenance duties only
	-2	in a BID with maintenance and security duties
Security cameras	0	none present
	-1	one stationary camera
	-2	two or more stationary cameras or any panning/moving camera
Security personnel	0	none present
	-1	one private security guard or up to two public security personnel
	-2	two or more private security or more than two public personnel
Secondary security personnel	0	none present
	-1	one person or space oriented toward reception
	-2	two or more persons or one person with space oriented at reception
Design implying appropriate use	0	none present
	-1	only one or two minor examples
	-2	several examples throughout the space
Presence of sponsorship	0	none present
	-1	one medium sign or several small signs
	-2	large sign or two or more signs
Area of restricted use	0	none present
	-1	one small area restricted to certain members of the public
	-2	large area for consumers; several small restricted areas
Constrained hours of operation	0	open 24 hours/day, 7 days/week, most days of year
	-1	part of space open past business hours or at weekends
	-2	open business hours only; portions permanently closed

Two criteria were omitted from the index, including "At a commercial building" and "In business improvement district." At a commercial building was eliminated because of the degree of subjectivity in the assumption that a commercial building has a positive impact on encouraging people to use the space. Similarly, location in a business improvement district made the assumption that being in such a district would automatically discourage certain users from being in the space. Also, it's valuable to remove any variables from the index that incorporate status of ownership and management. The omission will maintain ownership and management as independent variables and allow the index results to be the

dependent variable. A business improvement district is a type of owner and manager of public space, which would confound the results of the analysis.

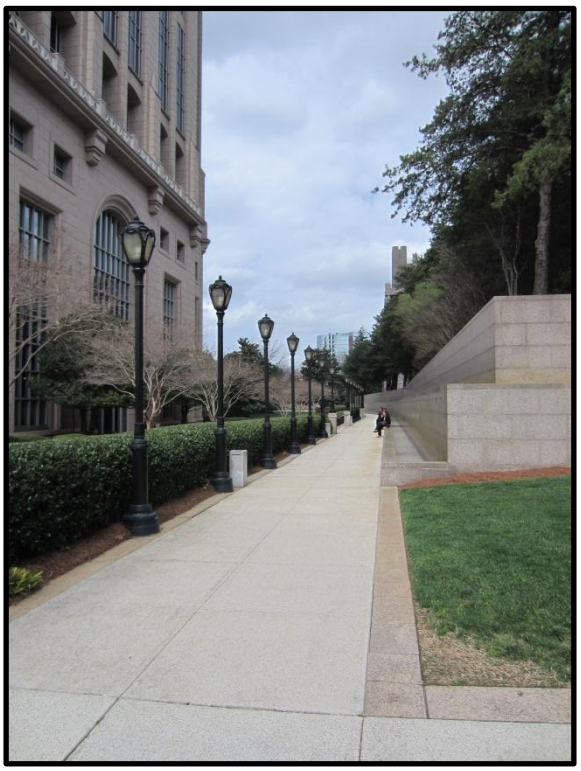
Surveying spaces

The twelve public spaces were surveyed within two consecutive weeks in March from 11:00am to 1:30pm on warm, non-rainy days. Surveying the spaces during these times permitted observation of any management techniques used in the space, such as security guards or secondary personnel. This was also a good time for anecdotal observations such as users in the space and how the areas around the space may contribute to any findings in the research. Photos were also taken in the space, and the conditions at this time were ideal for picture quality and to get a sense of what activity in and around the space is like at peak times during the day.

Results

The following table is a summary of the results from surveying public spaces, which displays each spaces "score" on the index. A space can score anywhere from -18 to 18. Negative scores indicated more controlled spaces and positive scores indicate more freedom to use the space. The overall score is the summation of negative and positive values for the individual features included in the criteria. For any one criterion, a score can range from -2 to 0 for controlling factors or 0 to 2 for freedom-lending factors. Thus, a space could have extreme scores of negative twos and positive twos and still have an overall score of zero just as a space that scores zero on all criteria.

Total scores for all criteria are displayed in Table 1, listed in descending order of highest scores to lowest. The highest scoring space was One Atlantic Center, a privately owned and managed space in Midtown. The space includes two large fountains, a gazebo, lighting, and several seating types such as benches and café seating. The space did not have any sponsorship signs, displayed rules, or visible security personnel. There were several access points both south and west of the parcel from the street and sidewalk, and was easily visible from the public street and sidewalk as well.



Views of One Atlantic Center grounds with public spaces on north and east sides of the office building. The space excels in positive features such as various microclimates, diverse seating types, and visual enhancements. The space has close to none of the negative features in the Index.

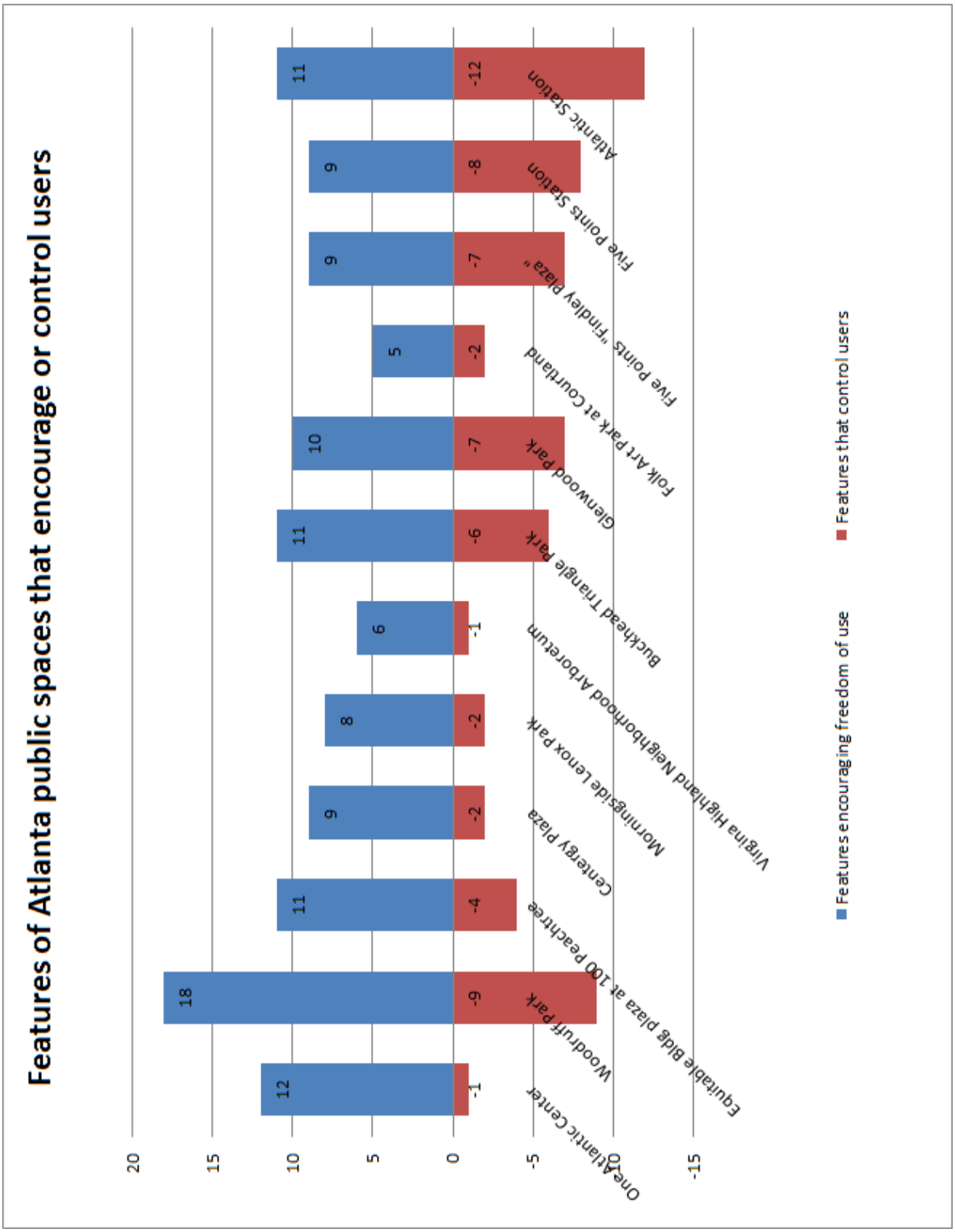
The highest-scoring half of spaces are evenly split among publicly- and privately-owned and operated. All of the spaces, except for Atlantic Station, have overall positive scores, or more features that afford freedom for the user than features that control the user.

Table 3. Total scores of public spaces from highest score to lowest score

Public Space	Ownership/management	Freedom features	Control features	SCORE
One Atlantic Center	*private*	*12*	*-1*	***11***
Woodruff Park	public	18	-9	**9**
Equitable Bldg plaza	*private*	*11*	*-4*	***7***
Centergy Plaza	*private*	*9*	*-2*	***7***
Morningside Lenox Park	public	8	-2	**6**
Virgina Highland Neighborhood	public	6	-1	**5**
Buckhead Triangle Park	public	11	-6	**5**
Folk Art Park at Courtland	public	5	-2	**3**
Glenwood Park	*private*	*10*	*-7*	***3***
Five Points "Findley Plaza"	public	9	-7	**2**
Five Points MARTA Station	*private*	*9*	*-8*	***1***
Atlantic Station	*private*	*11*	*-12*	***-1***

Looking at Figure 6, among the top-scoring spaces, most receive a high score due to high scores for positive scoring features and relatively smaller negative scores for controlling features. Only one space among the top six-scoring spaces, Woodruff Park, scores very low on negative features among that selection. Woodruff Park actually scores the highest on freedom-encouraging features; however, its total score is lowered due to its very low score on controlling features. This is mostly due to a high presence of displayed rules, design that implies “appropriate” use, and security personnel.

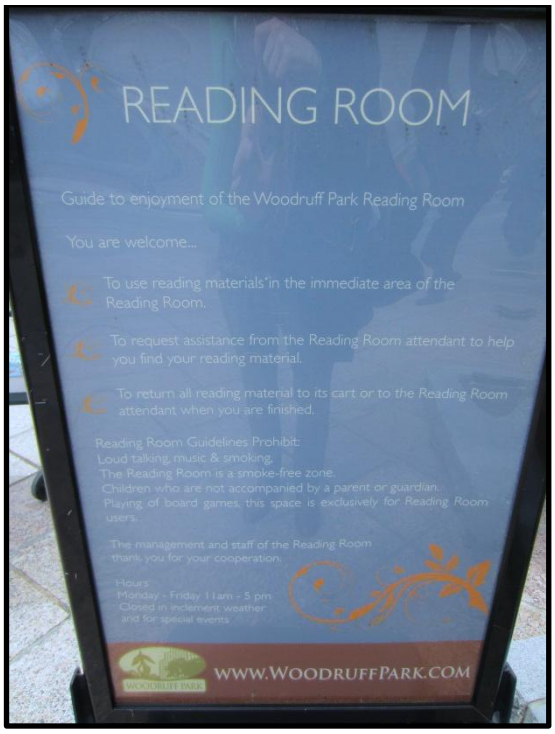
Figure 6. Features of Atlanta public spaces that encourage or control users, descending in total score from left to right

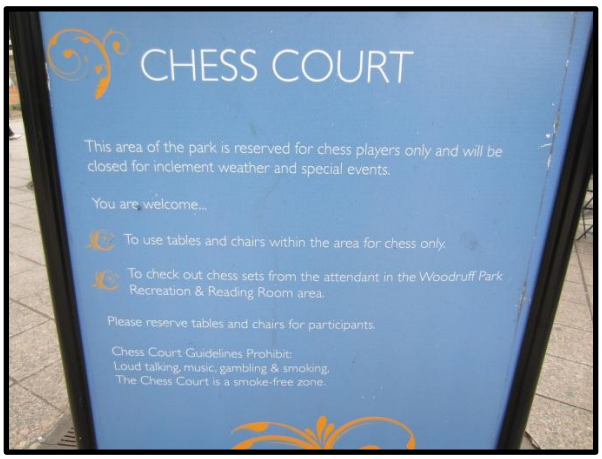


View of Woodruff Park, southwest portion. The space scores very well for various microclimates and diversity of seating.

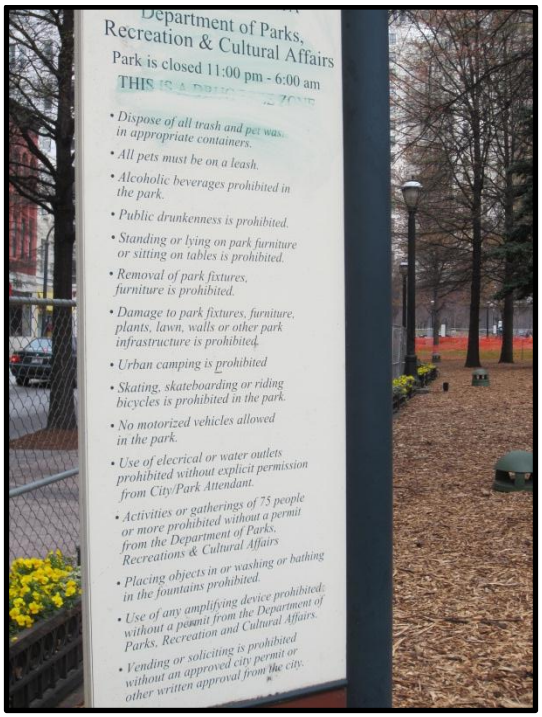
View of Woodruff Park's outdoor dining area and reading room on the north end of the park. The image includes another example of the diverse seating types and accessibility.

Examples of "design implying appropriate use" in Woodruff Park. The top photo demonstrates an area for exercising. The bottom photograph shows planters and silver balls on ledges that discourage sitting, lying and skateboarding.



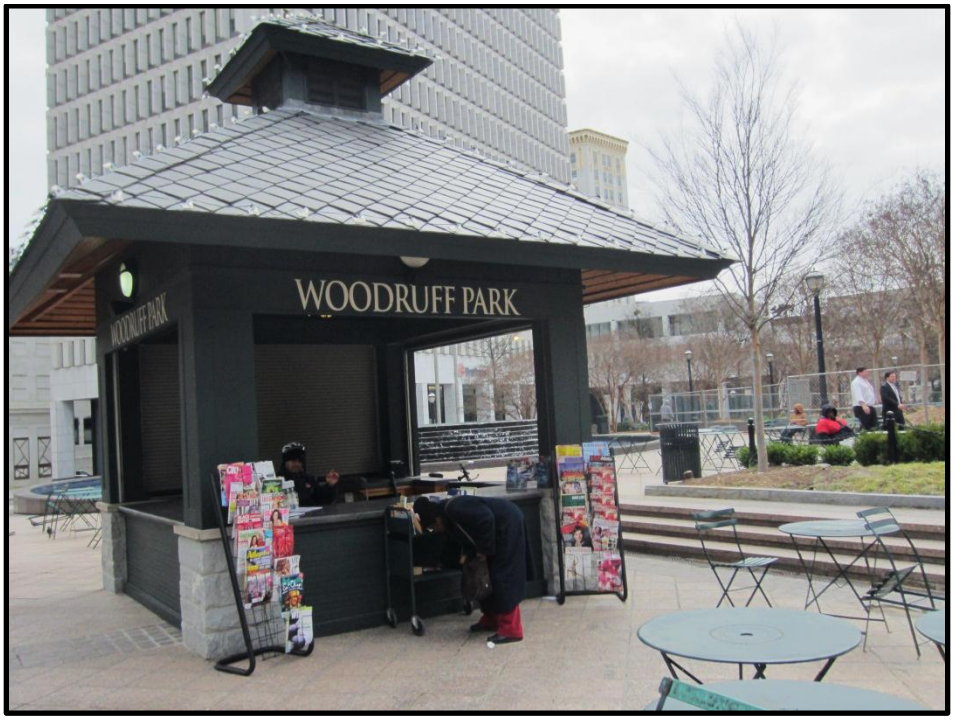


Examples of displayed rules in Woodruff park. Many sections of the park had a specified use with permitted activity listed on these signs. These different "rooms" of the park include a chess-playing area, public speaking and performance area (requiring permit), a reading room, and outdoor dining area.



Top: General park rules are an example of a negative or controlling feature of space. These fifteen rules in Woodruff Park list both city ordinances that apply to all public parks and non-ordinance rules specific to Woodruff Park

Bottom: Woodruff Park Ambassador, employed by the Central Atlanta Progress Business Improvement District serves as "secondary personnel," an authority figure that earns a negative score



Even several of the spaces with the lowest scores perform relatively well on freedom features, but have very low scores for the control features, bringing their total scores closer to zero. Atlantic Station scored the lowest, even though it did not score the least points on positive features. Rather, the extensive rules and security brought the total score negative.

Atlantic Station scores very well on positive features, as seen here with seating, lighting, and good access. However, many negative features such as posted rules, security and secondary personnel give the space a much lower score.

Atlantic Station

Three categories group the features that promote freedom to use space into access, basic amenity and extra amenity. The features included in each category are listed below.

Access	• Sign announcing public space • Entrance accessibility • orientation accessibility
Basic amenity	• Diversity of seating types • various microclimates • lighting to encourage night use
Extra amenity	• Restroom available • Small-scale food consumption • Art/visual enhancement

The three remaining categories group the controlling features into rules, design influence, and security. The features in each of those categories are listed below.

Rules	• Visible sets of rules posted • Subjective rules posted (rules not enforceable by law) • Constrained hours of operation
Design influence	• Design implying appropriate use • Presence of sponsorship • Area of restricted use
Security	• Security cameras • Security personnel (police or security guards) • Secondary security personnel (supervision by employees in or near space, such as receptionist)

Figure 7 breaks down the scores displayed in Figure 6 into components made of the six categories. The figure shows how each category individually contributes to overall score. In many cases, access and basic amenity seem to have the greatest influence on a space's score. Rules, when present, seem to have a big draw on making scores lower, while design influence and security may not apply to some spaces or are less severe in terms of bringing the overall score down.

Figure 7. Features of Atlanta public spaces that encourage or control users by grouped features

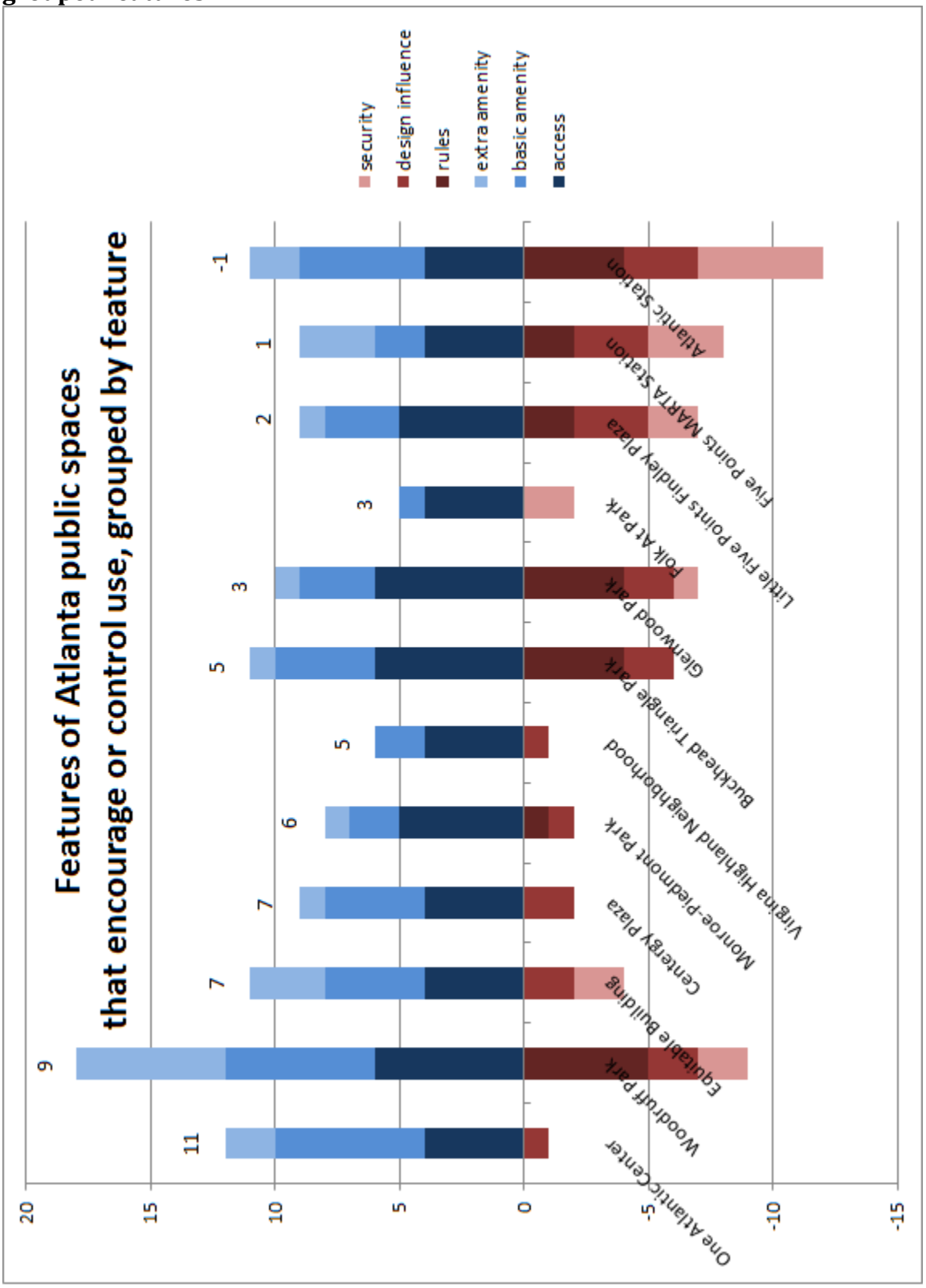


Figure 8 looks for features among the ten that stand out among public versus privately owned and managed spaces. Among the features that contribute to freedom of use, the public spaces seem to perform better only for sign announcing public space. Private spaces, on average, perform better by at least half a point (out of 2) for diversity of seating types and by a quarter of a point for small-scale food consumption. For those features that are controlling, public spaces score better, or less negative, on security cameras by half of a point and the presence of sponsorship by a whole point. Private spaces score better by at least a quarter of a point for visible sets of rules posted and design implying appropriate use.

Figure 8. Average score for features that encourage freedom to use space and average score for features that control users of space

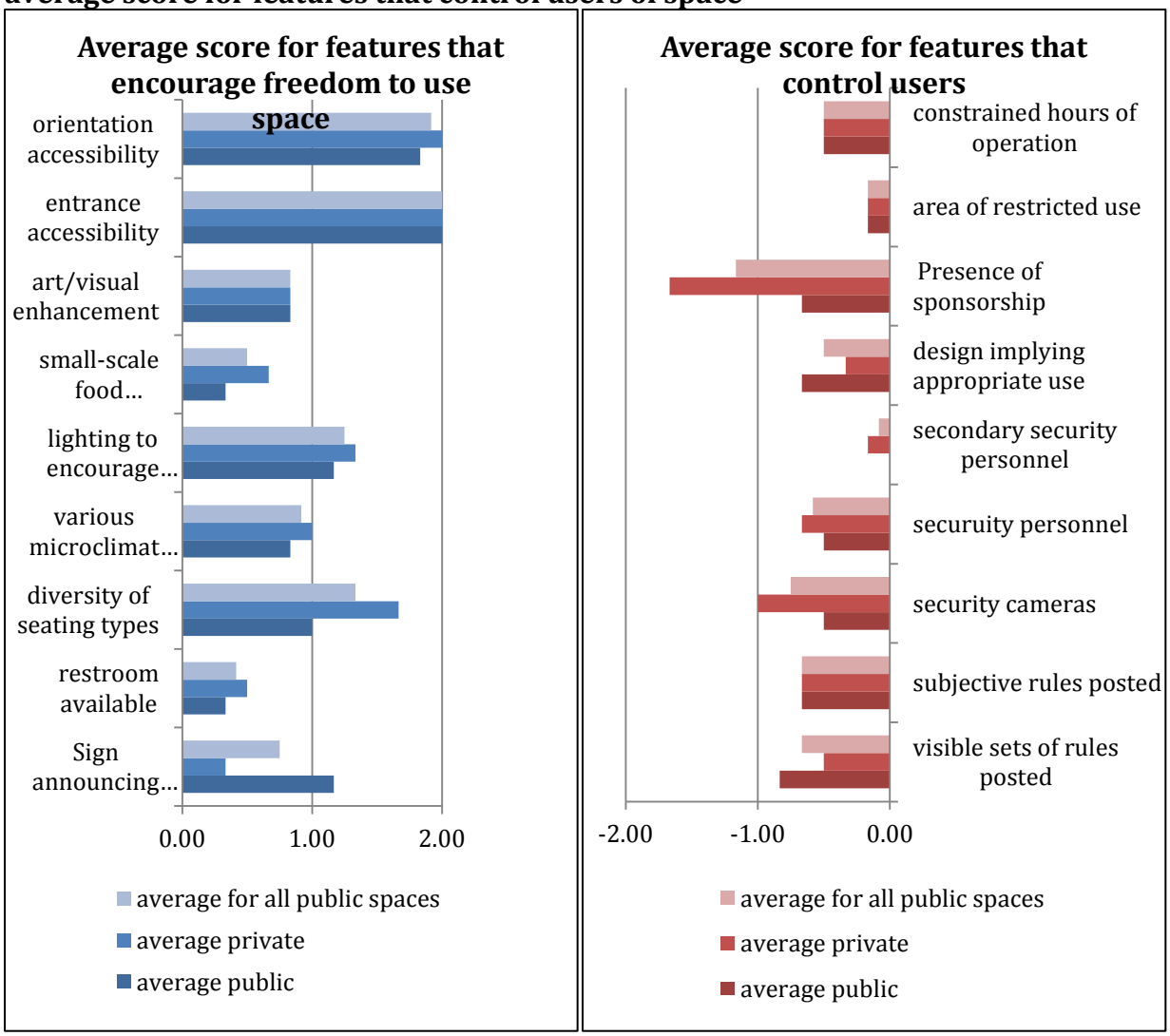
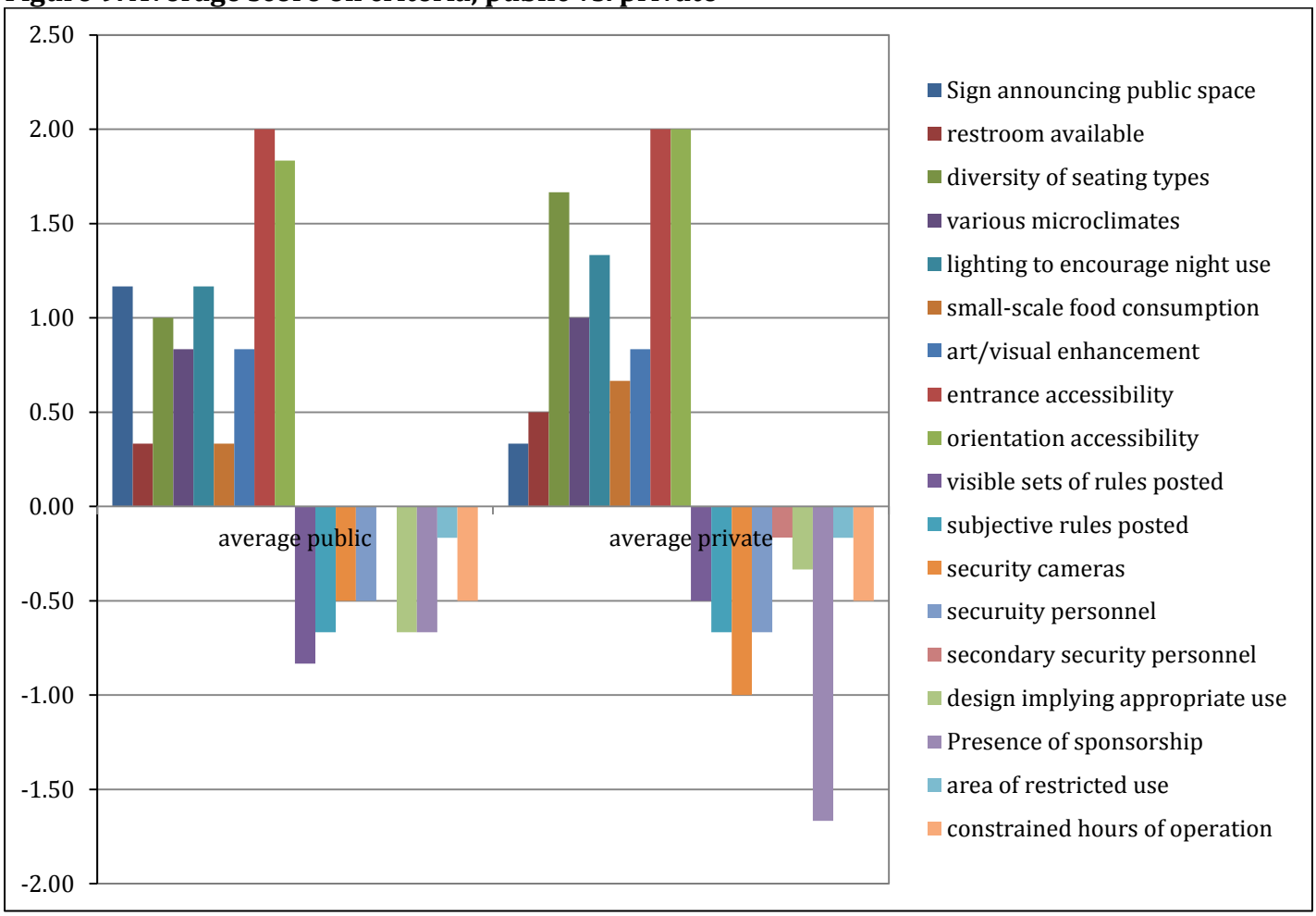


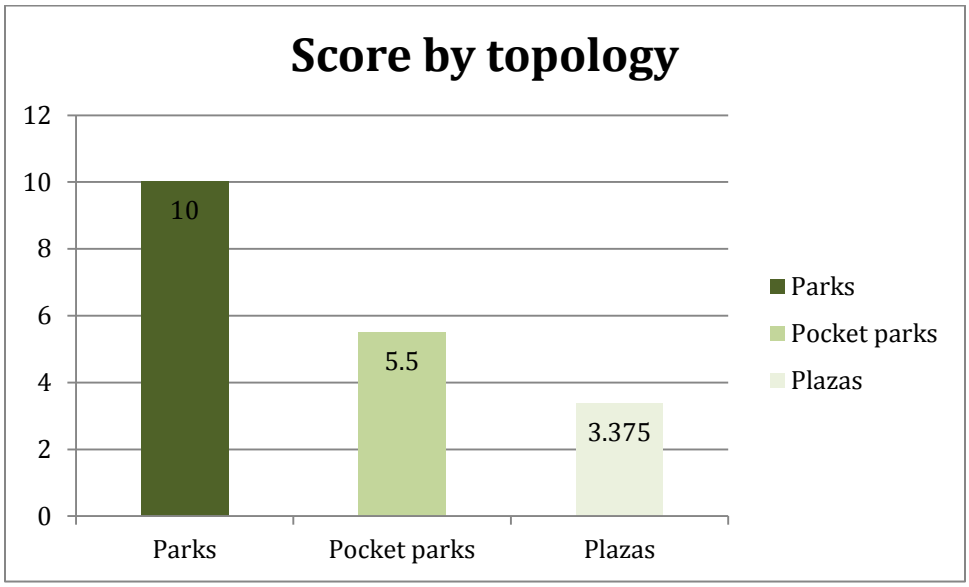
Figure 9 summarizes these same averages and groups them by public and private spaces. Both public and private spaces score well on entrance and orientation accessibility. Private spaces perform better on diversity of seating types, lighting, and small-scale food consumption. They also perform worse on security cameras, entrance accessibility, and presence of sponsorship. Public spaces generally score better only for sign announcing public space. Public spaces score worse for visible sets of rules posted and design implying appropriate use.

Figure 9. Average score on criteria, public vs. private



Looking at the average scores of the spaces by typology, there is a large difference in their average scores. Parks average score of 10, followed by pocket parks averaging 5.5 and plazas at 3.4

Figure 10. Score by typology shows that parks outperform pocket parks and plazas by a large amount on their index score



Related to this observation is the relationship between the size of the public space and its score. As the size of the space increases, scores for both sets of features, positive and negative, increase in absolute value. The overall score has a positive relationship with size because the relationship between size and positive features increases faster than the negative relationship between size and negative features. These relationships are graphed in Figures 11 and 12. The relationship between space size and positive features score in Figure 11 is statistically significant with a p-value of .0008. The relationship between space size and negative features score in Figure 12 has a p-value of .481, meaning that this relationship is not statistically significant.

Figure 11. Regression of size and positive features score shows that positive score increases with size

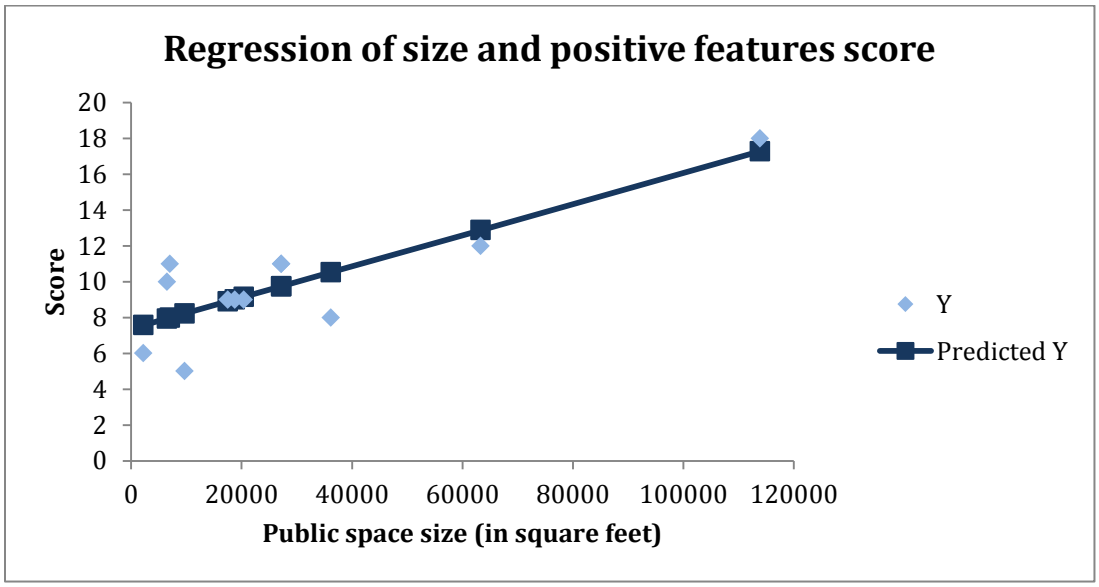


Figure 12. Regression of size and negative features shows that negative scores increase with size

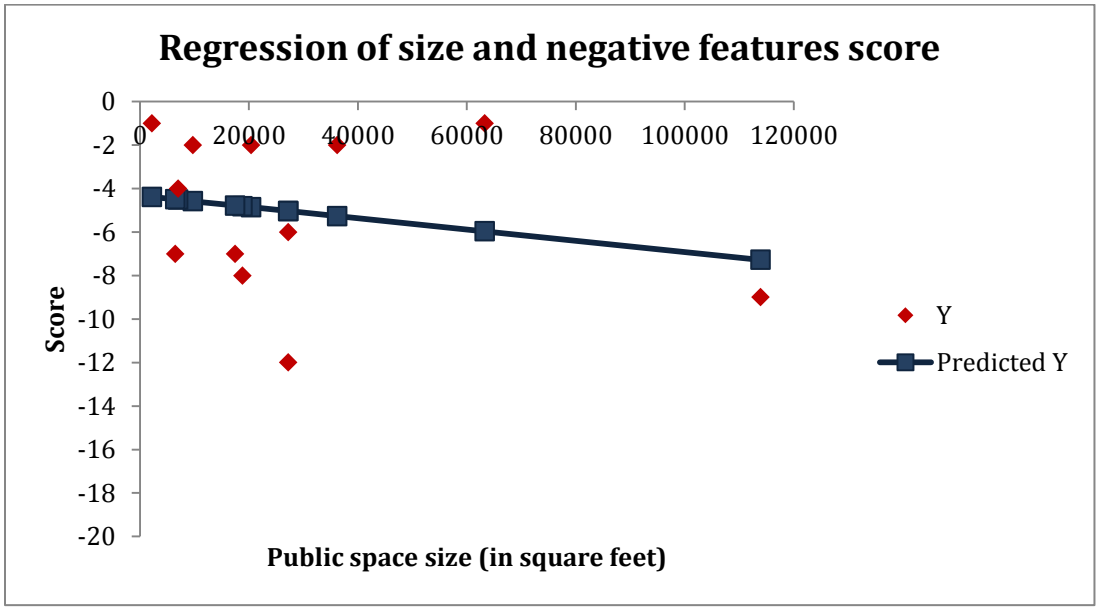


Figure 13. Public spaces' location and associated scores

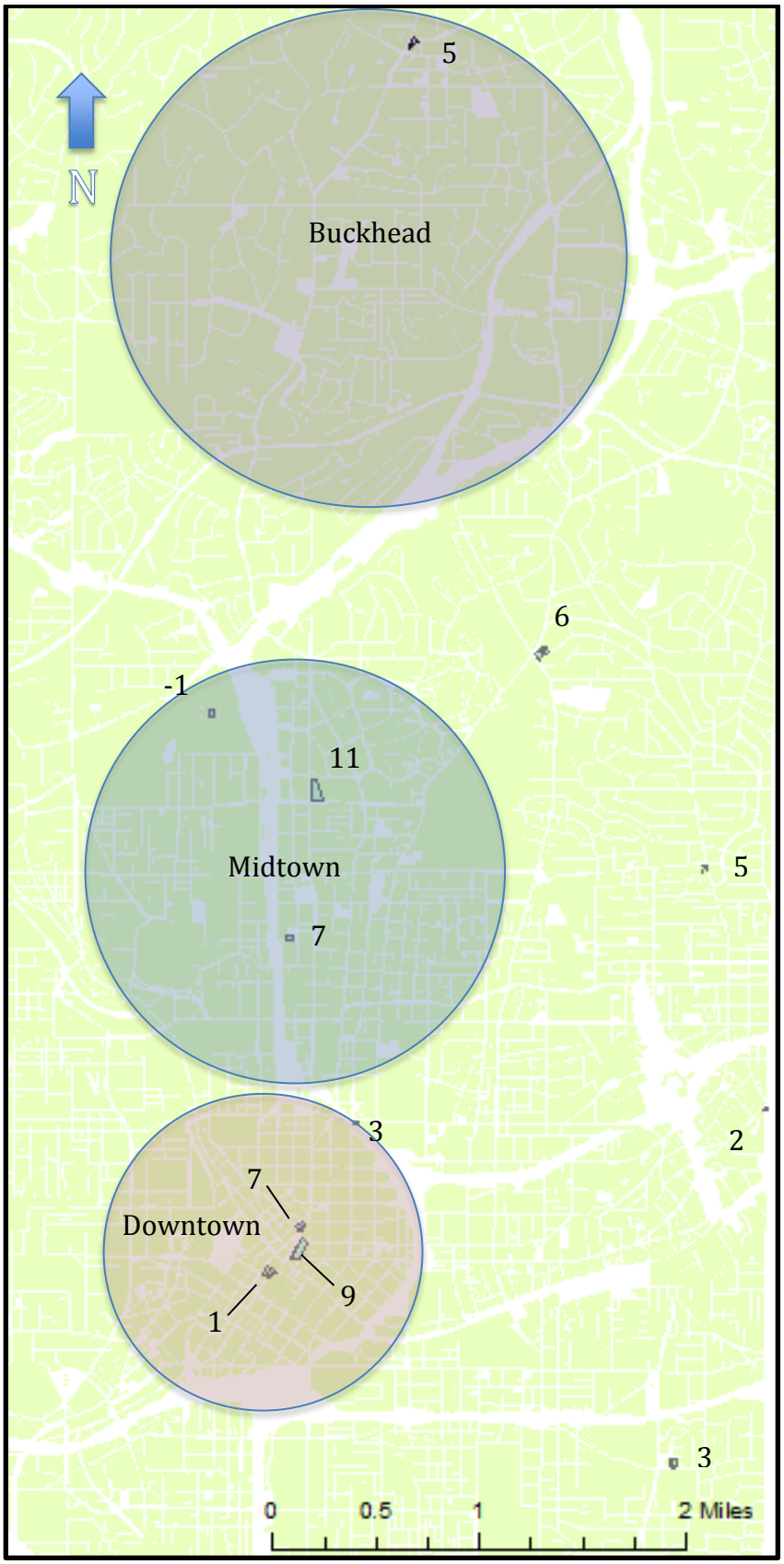


Figure 13 shows scores for each public space and their location within the city. Of the spaces surveyed, there is no clear relationship between geography and score for public space.

Summary of results

1. Eleven of the twelve spaces analyzed score positively on the index.
2. Neither public spaces nor private spaces consistently out-perform one another on the index.
3. Public spaces can score well on the index and still have very controlling features, such as Woodruff Park
4. A clear hierarchy of scores exist when spaces are grouped by typology, with parks out-performing pocket parks, and pocket-parks outperforming plazas.
5. A statistically significant positive relationship exists between public space size and the score for positive features.

Critiques of analysis

The index used weighs all factors equally, which might not produce results that would be expected. For example, seating, a very basic amenity, is weighted the same as art or visual enhancement, which doesn't provide the same sort of universal service as seating does and thus could be considered less of public of a feature compared to seating. A weighting system should be applied to the various indicators based on their level of influence on publicness. The accessibility features should be weighted the greatest, followed by basic features, and extra amenity. It would also be helpful to break down separate sets of indicators, and potentially weight them differently according to a public space typology.

Different sizes of spaces serving different needs of the public may call for different indices. For example, a large park with programming activities may have a legitimate need for security for safety reasons, and shouldn't necessarily be assumed as an anti-public feature and result in a negative score on the index.

In addition to the presence of security, many of the other indicators' incorporation into the index as positive or negative influence are subject to opinion and culture. Having signs of sponsorship is considered a negative on the index; however, some community groups may take pride in sponsorship or appreciate sponsorship of a public space. In other words, it may not be perceived as a threatening symbol that effectively wards off certain groups of people who might otherwise use the space. A potential remedy would be to get rid of the indicators where interpretation could plausibly be either positive or negative.

Another issue with the index is the way in which the score final score is calculated. As an average, scores are affected by extremes that may not truly affect the public space to the degree that the math allows it to. For example, the Little Five Points "Findley" plaza is the third-lowest scoring space with a score of 2 (9 and -7), but the users of the space indicate that the space is highly public. People in this space seem to come from various backgrounds, including individuals that seem to almost live in the space evidenced by their several belongings with them. This inclusivity that does not exist in many of the other spaces suggests that it is very difficult to use an index to model the publicness of space based on design and management indicators alone.

The index could improve its representation of inclusivity by incorporating a count of users in the space and give a higher score for higher counts of people present. It could also incorporate a score for the density of people in the immediate area during business hours as an additional indicator of accessibility. These indicators would better measure publicness by directly measuring use.

Policy Recommendations

The following policy recommendations respond to the conclusions drawn in the analysis section.

1. Clearly define a typology of public spaces, their purposes, and criteria to achieve that purpose.

It is clear that the park typology was the most successful in terms of being an inclusive public space. There is also a statistically significant positive relationship between space size and higher scores. However, that does not mean all public spaces should model the same scale and typology. Such a policy would ignore demand for other types of public spaces and would be infeasible in terms of acquisition of adjoining parcels of a large size for numerous locations in the city. Rather, the city can develop standards for varying public space typologies, whether publicly or privately owned and operated. Different types of space typologies, once established, can have varying degrees of standards to promote inclusivity and other objectives for public space.

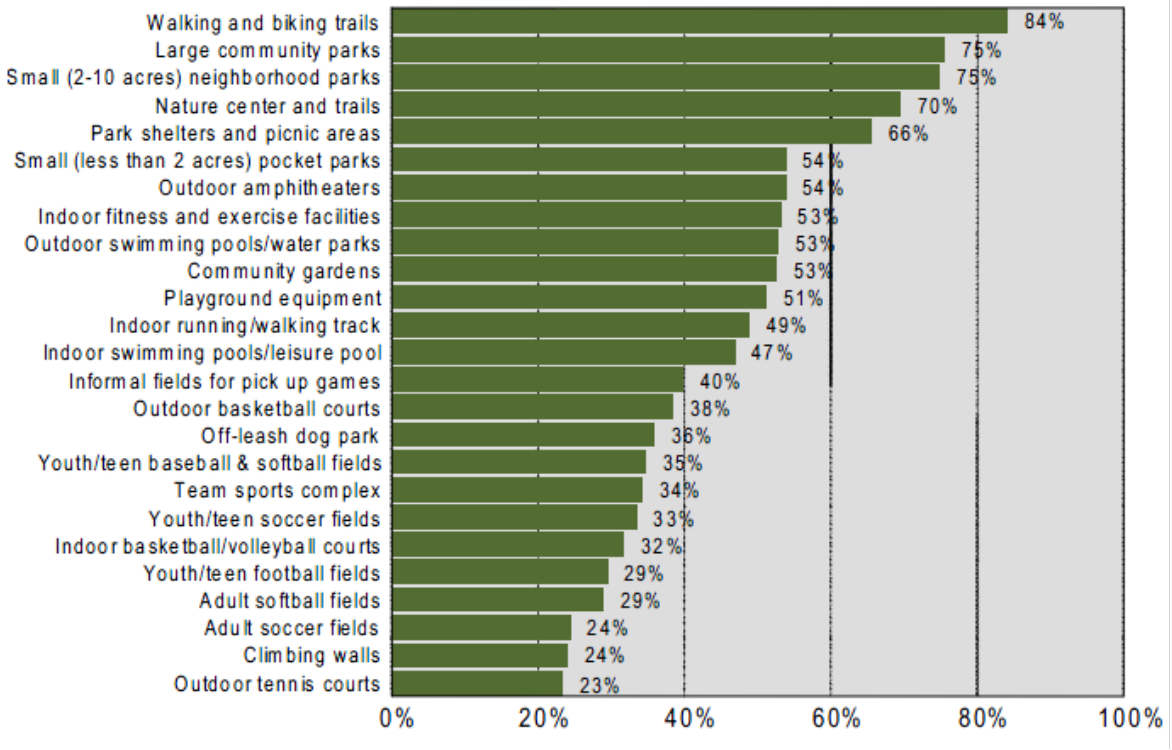
Additional standards could help improve pocket parks and plazas, which scored worse than the parks. Scores for each could be improved by increasing the number of positive features including accessibility, basic amenity and extra amenity. Requiring design standards and amenities will make the space more appealing to users. This is a better strategy than to focus on removal of negative features because it would have a much greater impact than would removal of negative features. For example, ensuring that the entrance to the space is accessible would have the potential to produce more users than would ensuring that there was no secondary security personnel. The design of the space is more basic and a more necessary component for publicness. The City should add to its open space and public space requirements those basic features of the best-scoring spaces, Woodruff Park and One Atlantic Center. This includes the standards for accessibility and basic amenity in the index, which make up 66% of Woodruff Park's positive score and 83% of One Atlantic Center's positive score. The specific high-scoring standards for those indicators include:

- Accessibility
    - more than one entrance without gates
    - visible with access off sidewalk (fewer than five steps)
    - one large sign or two or more signs announcing public space
- Basic Amenity
    - two or more types of seating or substantial moveable seating
    - several distinct microclimates, extensive overhands, trees
    - several lighting types

2. Apply the standard of total inclusivity and publicness to a larger geographic scale and allow individual spaces to meet only basic standards of inclusivity

Individual spaces can meet basic standards of inclusivity by ensuring access and basic amenities. However, there are conflicting standards of design and management that arise when trying to meet various public needs all in one space. An example from a design standpoint is that ledges, often functioning as landscaping features and often doubling as seating features, are usually found having a design that prohibits skateboarding. However, skateboarders are legitimate members of the public that need space to skate. Another example from the perspective of management is evidenced by Woodruff Park, where competing activities and behaviors have been partitioned off into different "rooms" within the park. In the case of the Speaker's Corner, bounding public speech to one section of the public in an effort to make different activities compatible makes the public space come dangerously close to violating the constitutional rights of Freedom of Speech and Freedom of Assembly.

Figure 14. Percentage households that have a need for various parks and recreation facilities



Source: Atlanta Project Greenspace, 2008

Having a network of public spaces within a reasonable distance of one another could meet different needs as identified by the public. This graphic is the result of a 2007 survey of Atlanta residents and their need for access to various types of public spaces and facilities. While many of the space types are outside of the scope of those assessed in this paper, it shows various demands on public space as well as how particular needs can be.

The Neighborhood Planning Units (NPU) system in Atlanta is an appropriate geographic scale to apply the inclusivity measure. Surveying the NPU members and meeting their

needs through public space planning and implementation would be a great process to make sure that different needs are being met throughout the city. If public spaces are added within the jurisdiction of NPUs, it is highly likely that the space will be accessible to most NPU members.

The Metropolitan Planning Council in Chicago developed the PlaceMaking tool, which is designed to help neighborhood-scale communities strategize and implement their needs for public spaces in their own communities. This online tool describes an 11-step process for communities to preserve existing public spaces and pursue new public spaces that fit their community goals. The tool also documents "Great Places" in Chicago with an interactive map of the space including directions, photos, and a description of why the space is important to the community. The tool communicates the importance of public spaces and aids communities in organizing themselves to gain support from their city aldermen to direct resources to their existing and planned spaces. The City of Atlanta should develop a similar tool for its spaces and dedicate a section of the site to resources for NPU districts wanting to add public spaces or preserve existing ones that they value. The online tool can be found at www.placemakingchicago.com.

3. Continue to create strategies to incentivize private development of public space

As the analysis demonstrated, all spaces but one had positive scores on the index and neither public or private spaces consistently out-scored the other. It may therefore be a good financial strategy for the city to provide public spaces while saving finances in the development and maintenance of the spaces. It will also open up more opportunities in

strategically locating public spaces as new developments will occur on the private side more frequently than public acquisition of land. The City could provide a set of incentives for development and maintenance of public space on their property. A few examples of incentives include:

- Traditional density bonus – allow an increase in FAR in return for public space
- Reduced impact fee – City provides a discount on the normal assessment of impact fees
- Dedicate a City staff person to the developer and their application for those agreeing to develop a public space. The staff person will act as a personal liaison to the city to make the city development review process quick and smooth for the developer.

These policy recommendations will increase the number and quality of public spaces in the City of Atlanta. They respond to the observations made in the analysis of 12 public spaces around the City of Atlanta, which all performed relatively well on the index. The fact that neither public nor private ownership and management of public space resulted in vastly different scores is a good sign that the City can take advantage of private resources for a public good. Simple additions to the current ordinance to require basic amenities and good accessibility will improve the publicness of future spaces as they are developed. Finally, communities can organize themselves to voice their need for different types of public spaces and work toward their implementation.

Appendix – Public Space Survey Results

	One Atlantic Center	Woodruff Park	Equitable Bldg plaza at 100 Peachtree	Centergy Plaza	Morningside Lenox Park	Virgina Highland Neighborhood Arboretum	Buckhead Triangle Park	Glenwood Park	Folk Art Park at Courtland	Five Points "Findley Plaza"	Five Points Station	Atlantic Station
Sign announcing public space	0	2	0	0	2	0	2	2	0	1	0	0
restroom available	0	2	1	1	0	0	0	0	0	0	0	1
diversity of seating types	2	2	2	2	0	1	1	2	1	1	0	2
various microclimates	2	2	1	1	1	0	1	0	0	1	1	1
lighting to encourage night use	2	2	1	1	1	1	2	1	0	1	1	2
small-scale food consumption	0	2	1	0	0	0	0	0	0	0	2	1
art/visual enhancement	2	2	1	0	1	0	1	1	0	1	1	0
entrance accessibility	2	2	2	2	2	2	2	2	2	2	2	2
orientation accessibility	2	2	2	2	1	2	2	2	2	2	2	2
visible sets of rules posted	0	-2	0	0	0	0	-1	-1	0	-2	-2	0
subjective rules posted	0	-2	0	0	0	0	-2	-2	0	0	0	-2
security cameras	0	0	-2	0	0	0	0	-1	-2	-1	-1	-2
security personnel	0	-2	0	0	0	0	0	0	0	-1	-2	-2
secondary security personnel	0	0	0	0	0	0	0	0	0	0	0	-1
design implying appropriate use	0	-2	0	0	0	0	0	-1	0	-2	-1	0
Presence of sponsorship	-1	0	-2	-2	-1	-1	-2	-1	0	0	-2	-2
area of restricted use	0	0	0	0	0	0	0	0	0	-1	0	-1
constrained hours of operation	0	-1	0	0	-1	0	-1	-1	0	0	0	-2
SCORE	**11**	**9**	**7**	**7**	**6**	**5**	**5**	**3**	**3**	**2**	**1**	**-1**

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