### **D.** Open Space

#### **100. Definitions**

For purposes of this section, open space is defined as publicly or privately owned land that is publicly accessible and has been designated for leisure, play, or sport, or land set aside for the protection and/or enhancement of the natural environment. Under CEQR, an analysis of open space is conducted to determine whether or not a proposed action would have either a direct impact resulting from elimination or alteration of open space or an indirect impact resulting from overtaxing available open space. These analyses focus only on officially designated existing or planned public open space.

Open space may be public or private and may include active and/or passive areas:

- *Public open space.* Only open space that is accessible to the public on a constant and regular basis or for designated daily periods is defined as "public" and analyzed for impacts under CEQR. Public open space may be under government or private jurisdiction and may include, but is not limited to, the following: parks designated by the City, State, and Federal governments (for the New York City Department of Parks and Recreation, "open space" includes public parks, beaches, waters and land under water, pools, boardwalks, playgrounds, recreation centers and all other property, equipment, buildings and facilities now or hereafter under the jurisdiction, charge or control of the agency); open space designated through regulatory approvals (such as zoning), including largescale permits that prescribe publicly accessible space, plaza bonuses, etc.; outdoor school-0yards; ball fields; institutional campuses; playgrounds; esplanades; designated greenways, defined as multi-use pathways for nonmotorized recreation and transportation along natural and manmade linear spaces such as rail and highway rights-of-ways, river corridors, waterfront spaces, and parklands; landscaped medians with seating; housing complex grounds; recreational facilities; gardens, if publicly accessible; nature preserves, if publicly accessible; open lawn areas; church yards or cemeteries with seating; beaches; waterfront piers currently used for recreation: etc.
- Private open space. This includes open space that is not publicly accessible or is available only to limited users and is not available to the public on a regular or constant basis. It is not included in the quantitative analysis but may be considered in the qualitative assessment of potential open space impacts. For example, private-access fee-charging spaces, such as health clubs, are considered private open spaces. In addition, the following are also considered private and are not included in the definition of public open space: natural areas or wetlands with no public access, streets, arcades, sidewalks, stoops, vacant lots, and front and rear yards. This space is only considered after an assessment of the proposed action's effects on public open space has been completed. If the action is likely to have indirect effects on public open space (such as greater utilization demands), the ability of private open space to influence or alter those effects may be considered.

Open space includes both "active" and "passive" areas as described below.

- Active open space. Open space that is used for sports, exercise, or active play is classified as "active open space." Active open space consists mainly of recreational facilities, including the following: playground equipment, playing fields (baseball, soccer, football, track), playing courts (basketball, handball, tennis), beach area (swimming, volleyball, frisbee, running), pools, ice skating rinks, greenways and esplanades (running, biking, rollerblading, hopscotch, and other active play), multipurpose play area (open lawns and paved areas for active recreation, such as running games, informal ball-playing, skipping rope, etc.), and golf courses, including pitch and putt.
- Passive open space. Open space that is used for relaxation, such as sitting or strolling, is classified as "passive." Facilities may include the following: plazas or medians with seating, a percentage of beach areas (sunbathing), picnicking areas, greenways and esplanades (sitting, strolling), paths, accessible restricted use lawns, gardens, church yards or cemeteries with seating, and publicly accessible natural areas used, for example, for strolling, dog walking, and bird watching.

In many cases open space can be used for active or passive recreation. These include lawns

and beaches, which permit both sunbathing and ad hoc ball or frisbee games.

A proposed action's effects on open space may be either direct or indirect. These are defined as follows:

- Direct effects may occur when the proposed action would encroach on or cause a loss of open space. Direct effects may also occur if the facilities within an open space would be so changed that the open space no longer serves the same user population. Limitation of public access and changes in the type and amount of public open space may also be considered direct effects.
- Other direct effects include the imposition of noise, air pollutant emissions, odors, or shadows on public open space. Assessment of these effects is addressed in the relevant technical s chapters of the manual and should be referenced for the open space analysis.
- Indirect effects may occur when the population generated by the proposed action overtaxes the capacity of existing open spaces so their service to the existing or future population of the affected area would be substantially or noticeably diminished.

#### 200. Determining Whether an Open Space Assessment is Appropriate

An open space assessment may be necessary if an action could potentially have a direct or indirect effect on open space. A direct impact would physically change, diminish, or eliminate an open space or reduce its utilization or aesthetic value. An indirect impact could result if an action would introduce a substantial new user population that would create or exacerbate an overutilization of open space resources.

Direct effects may not always result in adverse effects to open space. Alterations and changes to parks may be beneficial or may result in beneficial changes to some resources while having an adverse effect on others. In determining whether or not to prepare an open space assessment, consider whether the changes are likely to adversely affect utilization of existing resources or specific user groups of these resources.

#### 210. DIRECT EFFECTS

If a proposed action would have a direct effect on an open space, an assessment of the effects on open space and its users may be appropriate. Direct effects would occur if the action would result in the physical loss of public open space (by encroaching on an open space or displacing an open space); change the use of an open space so that it no longer serves the same user population (e.g., elimination of playground equipment); limit public access to an open space; or cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether on a permanent or temporary basis. Consideration of these effects during the construction phase of a project should also be taken into account when determining whether an open space assessment is required. The analysis of Construction Impacts, as described in Chapter 3S, should be consulted for a detailed discussion of impacts on parkland during the construction phase of a proposed project.

When the direct effect would be very small, however, so that it would be unlikely to change use of the open space, an assessment may not be needed. For example, a small widening of a roadway within a public park or the loss of a small amount of open space to support infrastructure may not warrant a full open space analysis. When few users or a limited age group of users would be affected, when new and comparable open space would be provided at the same location, or when the proposed alterations to an existing open space would be improvements, creating comparable or better facilities, significant adverse impacts are unlikely and a full assessment may not be needed. A simple comparison of conditions with and without the action and a discussion of the users affected may be adequate. However, most direct effects on open space do require assessment, particularly when there is any ambiguity as to whether the action would reduce the usability of an open space, detract from its aesthetic qualities, or impair its operation, or when more information on users of that open space may be appropriate.

In addition to consideration of direct effects on open space, in New York State if an action entails the use of parkland for a non-parkland purpose or the conveyance of municipal parkland, it may constitute "parkland alienation". Authorization of the New York State Legislature is required for parkland alienation. In New York City, approval of the New York City Council is required as well. The action may also be subject to the Uniform Land Use Review Procedure, known as "ULURP", authorized by Section 197-c of the New York City Charter. In addition, if federal funds were provided for the affected parkland, the action may also involve "conversion" of parkland, which is governed by the rules and regulations of the National Park Service of the U.S. Department of the Interior. The project sponsor should contact the City of New York Department of Parks and Recreation Parklands Office as soon as possible and review the "Guide to the Alienation or Conversion of Municipal Parklands", available from the State of New York Office of Parks, Recreation and Historic Preservation. Contact information for the City Department of Parks and the regional office of State Parks is included in Section 750 of this Chapter, "Location of Information."

#### 220. INDIRECT EFFECTS

If an action would add population to an area, that population would typically place a demand on existing open space facilities. Indirect effects may occur when the population generated by the proposed action would be sufficient to noticeably diminish the ability of an area's open space to serve the existing or future population. Typically, an assessment is conducted if the proposed action's population is greater than 200 residents or 500 employees, or a similar substantial number of other users (such as the temporary user population that might be introduced by a large shopping area).

#### **300.** Assessment Methods

Detailed analyses of open space may be conducted in stages of successively greater detail. In many cases it will be clear that a full detailed open space analysis is necessary—if the action would displace a highly utilized open space or introduce a large population in an area underserved by open space. In some cases, however, it may be less clear and an initial quantitative assessment may be useful in determining the need for a more detailed analysis of open space. Often, when potential effects from the proposed action are limited, the assessment can be targeted to address only those effects. In any case, the initial step is to define and map a study area.

#### 310. STUDY AREAS AND MAPPING OF EXISTING OPEN SPACE

The open space study area is defined to analyze both the nearby open spaces and the population using those open spaces. It is generally defined by a reasonable walking distance that users would travel to reach local open space and recreation areas—typically a one-half-mile radius for residential users and ¼ mile from commercial projects with a worker population. For actions that would result in mixed-use projects (e.g. residential/commercial buildings), it may be appropriate to analyze two study areas-one for residential users and another for nonresidential users. However, the boundaries are often adjusted and the study area may be irregularly shaped. The following steps may be used to define an open space study area:

Use a legible map of appropriate scale, such as a census tract map or DCP's *Bytes of the Apple* map, as a base map. Locate the site of the proposed action and draw the physical boundary of the area affected by the action.

- 2. From the boundary of all sites that would be developed as a result of the proposed action, delineate a radius of one-quarter mile for commercial projects or one-half mile for residential projects to create the generalized open space study area boundaries. As noted, it may be appropriate to define two study areas for mixed-use projects—one for residential users and another for commercial users.
- 3. Identify all census tracts with at least 50 percent of their area within the generalized study area. The study area should include each of those census tracts in their entirety. Exclude all census tracts that have less than 50 percent of their area within the study area.
- 4. Identify all open spaces within the study area defined in step 3. Field surveys of the study area are usually important to be certain that all appropriate open spaces are included. Determine the acreage for each of the open spaces within the study area as well.

If an action would displace an open space, or for extremely large sites, the boundary may also need to be adjusted to reflect additional open space resources likely to be affected. For example, if a tot lot would be eliminated under a proposed action, other existing tot lots should be included in the map—even if they are located beyond the one-half-mile radius. If only direct effects from the action are expected, it may be possible to target the assessment to spaces that would be similar to those affected by the action. If the action is programmatic or generic, prototypical sites may have to be chosen for the analysis.

5. Other boundary adjustments may be necessary to account for natural boundaries (ravines, rock outcroppings, water bodies, very steep slopes, wetlands) or built features (depressed highways, canals, railroad rights-of-way, etc.) that preclude access to open spaces within the study area. A written rationale for any adjustment of the boundary should be provided.

#### 320. ANALYSIS TECHNIQUES

If an open space assessment is appropriate (see Section 200, above), the analysis examines the type of open space and user population affected by the proposed action. (For example, a commercial or mixed-use project may introduce a large worker population, which would tend to place demands on passive open space. The analysis would examine in further detail the amount of passive open space available with and without the project to quantify the impact, and hence, the mitigation, more specifically.) Overall, the goal of the open space assessment is to determine the significance of change in the availability of open space relative to the demand from the population, and/or the significance of change in the enjoyment potential of open space affected by the proposed action.

For actions that would have a direct effect on a specific type of open space without introducing a significant new user population, it may be possible to target the assessment. The open space analysis may be targeted toward those open space resources that are similar to the space that would be eliminated or altered by the action. For example, if the direct effects are limited to an open space resource targeted for a certain age group, such as a tot lot for toddlers and preschoolers, the impact assessment may be targeted to assess only that age group and nearby tot lots.

#### 321. Initial Quantitative Assessment

An initial quantitative assessment may be useful if it is not clear whether a full, detailed open space analysis is necessary or whether the open space assessment can be targeted to a particular user group. Because the full, detailed open space analysis includes a great deal of data collection and analysis, this first level of quantitative assessment may be useful in determining the need for a full assessment or in narrowing the focus of that assessment. When it is clear from the outset that the open space assessment can be targeted or that a full open space assessment would be necessary, this level of analysis may not be useful. However, this methodology also may not be useful in addressing direct qualitative changes to open space that could result from an action (such as loss of space for a particular user group, or air pollutant emissions, noise, or shadows that could make a space less useable). In other circumstances-for example where a study area appears to have a shortfall of open space that would be exacerbated by an action-this first level of quantitative analysis may be useful in clarifying the degree to which an action would affect open space and the need for further analysis.

The following methodology examines the change in total population relative to total open space in the study area, to determine whether the elimination of open space and/or increase in user population would significantly reduce the amount of available open space for the area's population:

- 1. Using the study area defined above, calculate total population at the time of the last (most recent) census, as described below. Census data can be obtained from the Department of City Planning, Demographics Division.
  - Actions that would result in an increase in residential population. Calculate the residential population of the study area. If the action would occur in an area with a substantial nonresidential population (i.e., employees, visitors, students, etc.), also calculate the nonresidential population of the study area.
- Actions that would result in an increase in nonresidential population (i.e., employees, visitors, students, etc.). Calculate the nonresidential population. If the action would occur in an area with a substantial residential population, also calculate the residential population of the study area.
- Actions that would result in an increase in both residential and nonresidential population. Calculate the residential and nonresidential population of the study area.

- 2. Calculate total open space in the study area, using the information gathered above (Section 310).
- 3. Determine the open space ratio in the study area, using the information from steps 1 and 2 as described below. The open space ratio is expressed as the amount of open space acreage per 1,000 user population.
- Actions that would result in an increase in residential population. Calculate the open space ratio for the residential population. If the action would occur in an area with a substantial nonresidential population, also calculate the open space ratio for the nonresidential population of the study area.
- Actions that would result in an increase in nonresidential population (i.e., employees, visitors, students, etc.). Calculate the open space ratio for the nonresidential population. If the action would occur in an area with a substantial residential population, also calculate the open space ratio for the residential population of the study area.
- Actions that would result in an increase in both residential and nonresidential population. Calculate the open space ratio for both the residential and nonresidential populations of the study area.
- 4. Add the population expected with the proposed action to the total population at the time of the last census (step 1, above).
- 5. Calculate any changes in the acreage of open space in the future with the action (accounting for increases and/or decreases resulting from the action).

Calculate the open space ratio with the action.

If the open space ratio would increase or remain substantially the same with the action in place, no further analysis of open space will likely be appropriate (unless direct, qualitative changes to an open space may occur because of the action).

If the ratio would decrease as a result of the action, the lead agency or applicant should consider the existing open space ratio and the extent to which the action would alter that ratio. For example, a Citywide survey and review of all community districts has indicated that half of the community districts have an open space ratio of 1.5 acres of City parkland per 1,000 residents. Study areas may differ in the type and extent of open space resources as well as in the user population profile. As a planning goal, the City attempts to achieve a ratio of 2.5 acres per 1,000 population for large-scale plans and proposals. However, this goal is often not feasible for many areas of the City and does not constitute an impact threshold. Rather, it is a benchmark that represents an area well served by open spaces.

Studies have shown that nonresidents, specifically workers, tend to use passive open space. Typically, 0.15 acres of passive open space per 1,000 nonresidents has been found to be adequate.

Decreases in the open space ratio would generally warrant a more detailed analysis under the following conditions:

If the decrease in the open space ratio would approach or exceed 5 percent, it is generally considered to be a substantial change, warranting more detailed analysis.

If the study area exhibits a low open space ratio (e.g., below 1.5 acres per 1,000 residents or 0.15 acres of passive space per 1,000 nonresidential users), indicating a shortfall of open space, even a small decrease in that ratio as a result of the action may have an adverse effect.

More detailed analysis of open space effects on residents for most actions will generally be unnecessary if the open space ratio decreases by less than 1 percent. However, the existing open space ratio may be so low that even an open space ratio change of less than 1 percent may result in potential significant open space impacts and should be further assessed. Typically, a 1 percent change should only be considered if open space resources are very scarce (e.g., below 1.5 acres per 1,000 residents) in the study area. For example, the closer the ratio is to 1.5 acres per 1,000 residents (and certainly the more it exceeds this ratio), the greater percentage of change that can be tolerated. This type of assessment is also applicable to the nonresidential population. The more the ratio drops below 0.15 acres of passive space per 1,000 population, the more likely the action is to have an effect on the nonresidential population's use of open space. This assessment may also consider and compare the amount of open space in the study area relative to the community district and the borough to assess the relative shortfall or availability of open space in the study area.

If this analysis suggests the need for additional assessment, the guidelines below may be followed.

#### 322. Detailed Assessment

The detailed open space assessment typically breaks down study area population by age group and details the amounts and quality of various types of open space to assess the availability of particular types of open space for particular age groups. In conducting this assessment, the analysis focuses on where shortfalls in open space exist now or would exist in the future, to identify whether they result from the action and to identify what sort of mitigation would be necessary. Where it is clear from the outset that the action would affect a particular type of open space or particular age group, this detailed assessment may focus on those issues.

#### 322.1. Identify Study Area Population

Determine the population in the study area using the most recent census for all census tracts in the study area as described above in Section 321. Depending on the amount of time that has passed and the level of development that has occurred in the study area since the last census, the study area population data may need to be adjusted to account for increases or decreases in population. Break down the population by age group and list age groups as both total persons and as a percentage of total population in study area, as shown in Table 3D-1.

#### Table 3D-1 Sample Table for Study Area Age Groups

Age Category	Persons	Percent of Total Population		
4 and younger	0,000		0.00%	
5-9				
10-14				
15-19				
20-64				
65 and older	V			

These age groups represent different types of open space users. (For example, the 4-year-oldand-younger age group typically uses tot lots, while other age groups may use a variety of active and passive facilities.) If it is clear that the area supports a substantial weekday population, such as workers, college students, or tourists, data on the size of such population and the source of this data may be appropriate. Data on daytime worker population can also be obtained from the Department of City Planning. Daytime college population can be determined by contacting administrative officers of colleges and other postsecondary educational institutions in the study area. Visitor population can be estimated using information from visitor attractions and major shopping attractions; this may include daily, weekend, or annual visitor counts and estimates of daily or weekend shoppers.

For an analysis targeting a specific open space and user population, this assessment may be focused on only that user population comparable to that which would be displaced. For example, if only a tot lot is to be affected by the proposed action, the demographic analysis can focus on the appropriate age group 4 years old and younger.

#### 322.2. Identify and Describe Study Area Open Spaces

Identify and describe open spaces included in the study area. This description may also note any major regional facilities (such as Central Park or Flushing Meadows Corona Park) that may be proximate to the study area boundary. Information about those resources may be obtained from the Department of Parks and Recreation and the Department of City Planning.

Data collection may include field surveys of the open space resources if current secondary data are not readily available. In these cases, it is recommended that information be obtained via at least two site visits, at least one of which is at the peak hour of use and in good weather, supported by information obtained through conversations with community groups and facility operators. For designated greenways, in particular, field visits will assist in assessing the portion of the open space utilized as active versus passive open space. For example, a field visit to the greenway along Route 9A will likely determine that 100% of the greenway is active, while a field visit to the Greenway in Manhattan's Riverside Park will result in a breakdown of active and passive activities. (Peak hour varies for different users and open space facilities. Commercial areas tend to have a peak hour at lunch time, noon to 2 PM, when most workers have lunch. Residential neighborhoods often have peak hour on weekends and after school, but verification with park operators and local open space experts may be useful. For example, some schools use parks for recess, and certain facilities in parks can attract users at anytime to create other peak hours. Greenways may see peak use for recreation on weekends and peak use for transportation purposes during work rush hours.

In general, the following data are useful in assessing open space conditions in an area; for actions that may affect a specific type of user or specific type of open space, this assessment may be tailored for that group. A sample format for gathering and organizing this information is provided in Table 3D-2.

- 1. Name and address of each open space facility.
- 2. Map key number. This ties the description to the map of open spaces described above in Section 310.
- 3. Owner (public/private).
- 4. Acreage.
- Percent of area (and acreage) devoted to active 5. and to passive uses. Estimates based on the facility type and equipment should be provided. general, the In following assumptions may be appropriate: esplanades are typically 50 percent active, 50 percent passive, whereas greenways are typically more active than esplanades; beaches can be considered 20 to 40 percent active, and 60 to 80 percent passive; sitting areas are 100 percent passive; ball fields are 100 percent active; multipurpose play areas are generally all active, unless field surveys confirm limiting conditions. Greenways can be assumed as 100 percent active. For greenways within park boundaries that utilize an existing esplanade, a breakdown of 70 percent active and 30 percent passive may be assumed. Golf courses, including pitch and putt courses, tend to serve a very limited portion of the population. The assessment may consider that although the golf course may contribute a substantial amount of open space acreage, it may not serve a comparable amount of the study area's active open space needs.

The lead agency may determine that other percent breakdowns for the affected resources may be more appropriate, based on information as to how these resources actually function.

- 6. Open space features, types of equipment, facilities, etc. In many cases, the features of an open space area (or lack thereof) may be important in assessing how the open space is currently used, and how it may be used in the future condition. For example, a passive open space area with no seating may not be useful; provision of seating and other attractive features, such as planters, can make that area more useable by both the existing community and new population introduced by a project.
- The quality of an open space is generally rated 7. as acceptable or unacceptable for overall condition and cleanliness. The quality of the open space's features and conditions is important in the assessment of whether or not the open space is actually used or useable. This information may be useful when a project sponsor must consider mitigation for significant adverse impacts to open space resources occurring within the proposed project's study area. Maintenance funds or capital improvements to a poorly maintained open space may increase its usefulness and reduce or offset a significant impact. (Significant impacts are discussed in Section 400, below.)

The following is a summary of the <u>Guide to the</u> <u>Parks Inspection Program & Official Standards,</u> <u>January 2001</u>, a publication of New York City Department of Parks and Recreation. This publication can be used, as appropriate, in assessing the quality of open space conditions.

The Parks Inspection Program is administered by the division of Operations and Management Planning of the City of New York Department of Parks and Recreation. Summary reports of inspections occurring over four seasons throughout the calendar year are available through Operations and Management Planning Division (OMP) of the City of New York Department of Parks & Recreation. Please consult Section 750, "Location of Information", at the end of the Open Space Chapter to obtain recent summary reports, as well as detailed information on the Parks Inspection Program.

# Table 3D-2Sample Table Listing Open Spaces



Open spaces are divided into three categories: Parks (including playgrounds), Small Greenstreets, and Large Parks. Each open space is rated Acceptable or Unacceptable for **Overall Condition and Cleanliness.** Ratings are based on the evaluation of 16 separate park features that are divided into three categories: Cleanliness, Structural, and Landscape. The Cleanliness features are Litter, Glass, Graffiti, and Weeds. The Structural features are sidewalks, Paved Surfaces, Play Equipment, Safety Surface, Benches, and Fences. The Landscape features are Trees, Lawns, Athletic Fields, Horticultural Areas, Trails, and Water Bodies.

An Acceptable feature rating indicates that combined routine maintenance is sufficient to address any deficiencies in cleanliness, structures, or landscaping. The routine cleanup of the park, whether it be daily or weekly, is sufficient to address any "unacceptable" conditions and City of New York Department of Parks & Recreation borough crews or shop forces are not needed to address these conditions.

An Unacceptable feature rating indicates that physical deterioration has begun to limit or discourages public use, requiring, in most instances, intervention by specialized borough crews, shops forces, and/or Capital Divisions of the City of New York Department of Parks & Recreation. Generally, an open space is rated unacceptable for cleanliness if any two cleanliness features are unacceptable or any one cleanliness feature is very unacceptable. A site's overall condition will be rated unacceptable if the site fails cleanliness, if any three of its features are unacceptable, or if any one of its features is very unacceptable. Some additional park elements such as signs, flags, comfort stations, and drinking fountains are inspected and tracked, but are not calculated in the cleanliness or overall condition of a site.

For a complete listing of park features that may contribute to the acceptable or unacceptable ratings, please consult the *Guide to the Parks Inspection Program & Official Inspection Standards*, prepared January 2001, by the OMP of the City of New York Department of Parks & Recreation.

- 8. Hours of operation and access. Many public open spaces, such as school playgrounds or public plazas, are open and accessible only during specified hours. This information is obtained through site visits, where required signage describes the hours of operation; discussions with operators; conversations with building superintendents; or, in the case of public plazas, either the operators or the Manhattan Borough Office of the Department of City Planning.
- 9. User groups. One assessment of the overall quality of an area's public open space facilities is based on how well those facilities fulfill the recreational needs of each age group. Recreational facilities typically used by different age groups are as follows:

Ages 4 and younger. Typically, children 4 years old or younger use traditional playgrounds that have play equipment for toddlers and preschool children.

- Ages 5 to 9 Children ages 5 through 9 use traditional playgrounds with play equipment suitable for school-age children, as well as grassy and hard-surfaced open spaces, which are important for ball playing, running, skipping rope, etc.
  - Ages 10 to 14. Children ages 10 through 14 use playground equipment, court spaces, little league fields, and ball fields.
- Ages 15 to 19. Teenagers' and young adults' needs tend toward court game facilities such as basketball and field sports.
- Ages 20 to 64. Adults continue to use court game facilities and fields for sports, as well as more individualized recreation such as rollerblading, biking, and jogging, requiring bike paths, esplanades, and vehicle-free roadways. Adults also gather with families for picnicking, ad-hoc active sports such as frisbee, and recreational activities in which all ages can participate.
- Ages 65 and over. Senior citizens engage in active recreation such as handball, tennis, gardening, and swimming, as well as recreational activities that require passive facilities.

## Table 3D-3 Facility/Age Worksheet

facilities		within 1/4	Total number within 1/2 mile	Location Key # (Same as Park Key #)	Proposed project related open space	Comments	
Toddler facilities: Ages 0 - 4 years	1. Simple play spaces with features such as: sand box, climbing equipment, and seating for caregivers; under 1000 square feet in size.		NA				
	2. Tot lot: a complex of age appropriate play facilities over 1000 square feet with a range of features such as: swings, slides, climbing equipment, water features, sand box and seating for care givers.	E	NA				5
	3. Unstructured play area, grassy or hard surface.		NA				
facilities appro- priate for children 5 to 14 years old.	1. Playground with a range of age appropriate features (swings, climbing equipment, sand and water play) and seating for caregivers.	NA	C	C	4		
	Age size sports facilities such as	NA					-
	2. Fields ( turf or hard surfaced) such as Soccer, Softball, Football, Baseball	NA					
	3. Courts such as: Tennis, Handball, Basketball	NA					
	4. Unstructured space (grassy or hard surface)	NA	C				
space appropri-	1. Fields, (turf or hard surface such as: Baseball, Softball, Soccer, Football	NA					
	2. Courts such as: Tennis, Handball, Basket <mark>b</mark> all	NA					
	3. Or courts such as Bocci, Shuffleboard, Basketball backboards.	NA					
	4. Jogging and Biking areas (Greenways)	NA					
	5. Unstructured spaces designed for active use.	NA					
	6. Others (Specify	NA					1
		NA					1

### Table 3D-3 Facility/Age Worksheet

facilities	Typical facilities and space; include any open space asso- ciated with Future No Action	within 1/4	(Same as Park Key	Proposed project related open space	Comments
		NA			

- The facility/age worksheet provided in Table 3D-3 can be useful in determining which of the study area's open spaces is appropriate for a given age group. For actions that could affect a specific type of open space or introduce a specific user group, the assessment may be targeted to that group.
- In some cases—particularly when an open space would be directly affected—it may be necessary to conduct a user survey to understand more fully the potential impacts on the users of the open space. User surveys may take the form of systematic interviews or observations of the users. These should be conducted when the open space is accessible during the day (e.g., hourly), weekends and weekdays, in good weather, and account for seasonal variations in use of open space. Documentation for surveys typically includes the date, time of day, and weather at the time the survey is taken.
- Observation surveys may include the following questions:
  - Who is using the open space?
  - How many are using the open space?
  - What facilities are being used?
  - What facilities are not being used?
  - Is the space adaptable for both active and passive uses?

Interview surveys may include the following questions:

- How frequently the user uses the open space during the course of the day, week, month, and season?
- How long do the users stay?
- What other facilities do the users currently use?

 Where are the users coming from and how do they get to the facility?
What parts of the facility do people use?

What attracts or detracts from the use of the open space?

- 10. Utilization level. The level of use an open space receives—low, moderate, or heavy—is also noted, as follows:
- Low utilization: 25 percent capacity or less utilization at peak hour. Much of the space, facility, or equipment is available for use.
- Moderate utilization: 25 to 75 percent capacity utilization at peak hour. Some passive spaces and/or active facilities are available for use.
  - Heavy utilization: 75 percent or greater capacity utilization at peak hours. Few or none of the open space facilities are available for use.

This information is obtained by site visits and by conversations with operators of the open space and with the community's open space experts. Factors that may be important in determining the utilization include the following:

Benches filled (Rule of Thumb: 3 feet person) (This is based on Whyte, William H., *The Social Life of Small Urban Spaces*, The Conservation Foundation, Washington D.C., 1980).

- Lines to use equipment or facilities.
- People leaving because it is crowded.
- People leaving before entering because it is too crowded.
- Multiple activities occurring and conflicting with each other.
- Inappropriate age groups using equipment and preempting appropriate age groups (e.g., teenagers using playground equipment, skateboarding in passive areas).
- Litter overflowing (can indicate capacity as well as maintenance management).
- Competition for use of facilities.

- 11. Other factors affecting utilization. Low utilization is not always an indicator of low demand. Some factors, either permanent or temporary, may create underutilization. These factors are often related to shadows, wind, air and noise quality, safety, and conflicting uses in a multiuse area, as described below. In some cases, a detailed utilization study may be appropriate.
- Shadows. Shadows on sun-sensitive uses, such as botanical or landscape attractions, swimming pools, or benches, can affect use of an open space. This information may be noted during the field survey. If a shadow assessment is being performed for the proposed action (see Chapter 3E of this Manual), the technical analyses and graphics presented in the shadow chapter should be considered and referenced in the open space assessment.
- Air Quality/Odors. These can also affect use of an open space. If the action is likely to have a significant air quality/odor impact on open space resources, the technical analyses presented in Chapter 3Q of this Manual should be referenced and considered in the open space analysis.
- Noise. Excessive noise, including traffic noise, can prohibit specific types of use from an open space. See Chapter 3R of the Manual for information on noise analyses. If the action is likely to have a significant noise impact on open space resources, the technical analyses presented in Chapter 3R should be referenced and considered in the open space analysis.
- Safety, Poor safety conditions can also deter use. These can be because of design (e.g., equipment with poor spacing), or conditions. Typically, important factors include access, crime, pedestrian safety, and other transportation issues.

#### *322.3. Assess the Adequacy of Open Space*

Use the data gathered in the tasks above to provide a brief evaluation of the study area's existing open space conditions relative to the open space needs of the study area users.

First, calculate the existing open space ratio for the study area, using the population and open space acreage data identified in Sections 322.1 and 322.2, above. The open space ratio is expressed as the amount of open space acreage per 1,000 population, and is calculated by dividing the total acres of open space by the population and multiplying by 1,000. This ratio may be tailored to age groups and types of facilities that would be affected by the proposed action. It is also usually appropriate to calculate separate open space ratios for active open space, passive open space, and total open space, based on the information gathered in Section 322.2, above.

Typically, it would be appropriate to provide the following information when calculating the open space ratio:

- 1. Actions that would result in an increase in residential population. Calculate the open space ratio for the residential population:
  - Number of acres of active open space per 1,000 residents;

Number of acres of passive open space per 1,000 residents; and

Number of acres of total open space per 1,000 residents.

If the action would occur in an area with a substantial nonresidential population, also calculate the open space ratio for the nonresidential population of the study area:

Number of acres of passive open space per 1,000 non-residents.

Actions that would result in an increase in nonresidential population (i.e., employees, visitors, students, etc.). Calculate the open space ratio for the nonresidential population:

Number of acres of passive open space per 1,000 nonresidents.

If the action would occur in an area with a substantial residential population, also calculate the open space ratio for the residential population:

- Number of acres of active open space per 1,000 residents;
- Number of acres of passive open space per 1,000 residents; and
- Number of acres of total open space per 1,000 residents.

- 3. Actions that would result in an increase in both residential and nonresidential population. Calculate the open space ratio for the residential and nonresidential populations of the study area:
- Number of acres of active open space per 1,000 residents;
- Number of acres of passive open space per 1,000 residents;
- Number of acres of total open space per 1,000 residents; and
- Number of acres of passive open space per 1,000 nonresidents.

Second, assess the adequacy of open space.

Typically, for the assessment of both direct and indirect effects, Citywide bcal norms have been calculated for comparison and analysis. In New York City, existing local area open space ratios vary widely, and 1.5 acres of City parkland per 1,000 residents is the median community district ratio. For large-scale actions (and for planning purposes). the City seeks to attain a planning goal of 2.5 acres per 1,000 residents, if appropriate and feasible. (The City's planning goal is based, in part, on National Recreation and Park Association guidelines from 1.25 to 2.5 acres per 1,000 residents of neighborhood parks within one-half mile, 5 to 8 acres per 1,000 residents of community parks within one to two miles, and 5 to 10 acres per 1,000 residents of regional parks within one-hour drive of urban areas. In addition, the City also consulted open space literature. New York City open space studies, and the Citywide average of parkland of 3.5 acres per 1,000 residents to develop the 2.5-acre goal.)

For nonresidential populations, specifically worker populations, generally 0.15 acres of passive open space per 1,000 workers represents a reasonable amount of open space resources for that population.

For large-scale actions (and for planning purposes), the City seeks to attain its planning goal of a balance of 80 percent active open space and 20 percent passive open space. Similar to the open space ratio discussed above, this planning standard is not a regulatory standard. Although a typical population mix may call for such a goal, it may not be appropriate or attainable for some areas of the City or for certain populations skewed toward certain age groups. Analyzing the breakdown of open space into the categories of passive and active uses often requires judgment, and for any particular case, typical open space resources may be used very differently.

To assess the adequacy of existing open space within the study area, consider the following factors:

- Is the open space ratio for the population of the study area less than 2.5 acres per 1,000 residents, the City's planning goal?
- Do effects of air or noise quality, shadows, extreme wind conditions, or issues of safety, such as the siting of facilities within parks with poor spacing or design features, or the lack of safe nonmotorized access to or within open space resources cause a decrease in the usability of the open space supply?

Is the proportion of active and passive open space appropriate for the population and age groups served? Note that for areas in which there is a substantial worker, student, or visitor population, typically there is a need for more passive space resources.

- Other data gathered in Section 322.2, above, including the following: user population by age; fees or other charges; types of facilities available to serve needs of different age groups; the variety of active and passive uses; conditions of facilities; utilization levels; and factors that may encourage or deter use including accessibility of different types of open space (physical location and barriers to access), competing uses, fee or hour restrictions.
- Such other factors as the availability of any major regional facility (e.g., Central Park), the predominant housing type, and the availability of private open space facilities to serve the existing population.

These questions may be evaluated in context with the study area and the neighborhood.

The type of action proposed will also affect the factors considered. Residential projects will typically focus on the appropriateness of an area's open spaces for the different age groups in the study area; commercial projects typically describe the adequacy of available open space for office workers, who may use passive facilities within <sup>1</sup>/<sub>4</sub> mile for sitting, socializing, eating lunch, and strolling. Mixed-use projects should describe the

adequacy of available open space for residential as well as commercial workers.

For actions that would have direct effects on specific facilities, this assessment may be focused on only those open spaces that are comparable to those that would be displaced.

#### 322.4. Future No Action Condition

The future no action analysis projects conditions in the study area for the build year without the proposed action, providing a baseline condition against which the impact of the action can be measured. The analysis includes data on projected population as well as recreational facilities/open space facilities built or approved to be constructed by the build year. The same level of analysis provided for the assessment of existing conditions is applied here. The analysis will consider any changes to the following factors expected in the future without the project.

- Study area population. Based on the development and population projected for the future build year, estimate the projected population in the study area by age group. Consider changes in daytime population for actions that would increase the nonresidential population.
- Identify and describe study area open spaces. Identify any changes to open space anticipated by the future build year. Include new open space and alterations/deletions to existing open space. Also include changes that have been adopted or officially approved by a public agency. This inventory may include projects under construction, *public* open spaces that have been approved as mitigation for other projects, or open spaces that are commit-Parks and ted in the Department of Recreation's Capital Budget. The same information gathered in steps 1 through 11, above, in Section 322.2, will be appropriate for this inventory as well (with the exception of facility conditions, utilization levels, and, possibly, factors influencing utilization levels). If the project may have potential significant shadow, air quality/odor, or noise impacts, or alter the accessibility of open space resources, (factors which may affect the utilization of open space resources and are more fully described in Section 322.2(11)), these conditions in the Future No Action Condition should be analyzed and described.

Assess the adequacy of open space. The purpose of this step is to determine the open space conditions in the future no action condition as it relates to the needs of the number and types of users predicted for the future no action condition. This assessment is performed in the same way as the assessment of existing adequacy, described in Section 322.3, above. This includes calculating the open space ratio for the future no action condition, and qualitatively assessing whether or not the area is sufficiently served by open spaces, given the types of open space and the profile of the study area population.

#### 322.5. Future Action Condition

The future action assessment analyzes conditions in the study area for the build year with the proposed action/project. Both the quantitative and qualitative factors are considered in the assessment to the extent to which the action may affect the existing open space resources and their capacity to serve the study area population.

This assessment typically begins with a brief description of the project, considering how it might affect open space—by displacing or encroaching on open space, introducing a population that would place demands on open space, etc. Then, the analysis is performed using the same methodology as for existing conditions and for future no action conditions, described above. This includes the following.

- *Identify changes to study area population.* This projection will be based on population projections for the proposed action (see Chapter 3B, Socioeconomic Conditions) together with future no action conditions determined above. For the project population, provide a breakdown by age, and a description of the estimated daytime population (workers, students, tourists), as appropriate.
- Identify and describe changes to study area open spaces. Describe the open space changes from the no action condition, both on site and off site, which would occur as a result of the proposed action. Describe the open space that would be eliminated, altered, created and/or improved as a result of the action.
- Assess the adequacy of open space. Calculate the ratio of acres of open space per 1,000 population. Indicate the additional users as a

result of the proposed action and assess the adequacy of open space resources to accommodate these users. Note whether the project would provide on-site open space resources in sufficient quantity and quality to serve the needs of its users adequately (offsetting any effect of the anticipated increase in population). This may be private as well as public open space. For example, the zoning requirements for Quality Housing mandate indoor recreational space as well as exterior open space. This space would typically satisfy some of the demand created by such a project.

If the action is likely to have potential significant shadow, air quality/odor, or noise effects on open space resources, consider those effects as well. Refer to the appropriate technical analyses.

#### 400. Determining Impact Significance

In this step, the level of significance of an action's effects on an area's open spaces is defined, qualitatively and quantitatively. It is generally appropriate for actions to undergo both the quantitative and qualitative evaluation compared with the future no action condition.

#### 410. QUANTITATIVE IMPACT

The proposed action may result in a significant impact on open space in the following circumstances:

 There would be a direct displacement/alteration of existing open space within the study area that has a significant adverse effect on existing users, unless the proposed action would provide a comparable replacement (size, usability, and quality) within the study area (net loss of publicly accessible open space).

The action would reduce the open space ratio and consequently result in overburdening existing facilities or further exacerbates a deficiency in open space.

When assessing the effects of a change in the open space ratio, consider the balance of passive and active open space resources appropriate to support the affected population. A larger percent of active space is usually preferred, because the physical space requirements for active open space uses are significantly greater. That is, a greater number of passive open space users, such as those sitting on a park bench to enjoy fresh air, can be accommodated within a smaller space. Active open space users have greater physical space needs for the movement and activity required for active recreation, such as children's play equipment, organized or spontaneous sports such as frisbee or ball playing, hopscotch, or other outdoor exercise.

In assessing the effects of changes in the open space ratio, the active/passive nature of the resources affected should be considered. As noted earlier, for large-scale actions (and for planning purposes), the City seeks to attain a planning goal of a balance of 80 percent active open space and 20 percent passive open space. Although a typical population mix may call for such a goal, it may not be appropriate or attainable for some areas of the city or for certain populations skewed toward certain age groups. Analyzing the breakdown of open space into the categories of passive and active uses often requires judgment, and for any particular case, typical open space resources may be used very differently.

The lead agency should review existing open space norms for the area and the quality of existing open space. Actions that may result in significant quantitative impacts on open space resources are typically further assessed in the qualitative assessment approach (described below) to determine overall significance of the impact.

#### 420. QUALITATIVE IMPACT

Identify the type (active or passive), capacity, conditions, and distribution of open space. Determine whether the change in open space conditions and/or utilization results in a substantial change or an adverse effect to open space conditions.

Significance is generally determined according to the following guidelines:

- If the proposed action results in a significant physical impact on existing open space in terms of increasing shadow, noise, air pollutant emissions, or odors compared to the future no action condition, then there is a significant impact requiring mitigation.
- If the proposed action addresses the quantitative open space needs, but causes a qualitative impact compared to the no action condition, then there may be a significant impact on open space, requiring mitigation.

This could occur if a specific user group would be affected (such as young children or boccie players), even though the overall open space ratio would be adequate; if certain age groups would be underserved; or there would be conflicts in the utilization of open space as a result of the action.

#### 500. Developing Mitigation

If the proposed action results in significant adverse open space impacts, on site or off site mitigating measures are identified to the greatest extent practicable.

Some ways in which open space impacts may be mitigated are as follows:

- Create new public open space on site of the type needed to serve the proposed population and to offset their impact on existing open space in the study area.
- Create new public open space elsewhere in the study area of a type needed to serve the needs of the added population.
- Improve existing open spaces in the study area to increase their utility, safety, and capacity to meet identified needs in the study area.
- Mitigation for the alienation or conversion of public parkland typically involves the acquisition of replacement parkland of equal or greater size and value servicing the same community of users.

#### 600. Developing Alternatives

Alternatives to the proposed action that would avoid significant impacts on open space resources could include a smaller project (creating less demand for open space) or an alternate site (transferring the open space demand to an area with sufficient supply to accommodate the added demand). If an action may involve the alienation or conversion of parklands, the possible use of alternative sites should be given ample consideration as early as possible in the planning process.

Alternatives to the proposed action are analyzed using the methodology described under the future build condition and impacts are compared to those of the proposed action.

#### 700. Regulations and Coordination

#### 710. REGULATIONS AND STANDARDS

SEQRA (617.11(a)(8)) and the 1977 Mayoral Executive Order 91 both state that a significant impact would occur if an action resulted in "a substantial change in the use, or intensity of use, of land including agricultural, open space or recreational resources, or in its capacity to support existing uses."

# 720. PROJECTS WITH U.S. DEPARTMENT OF TRANSPORTATION FUNDING

The U.S. Department of Transportation Act of 1966 Section 4(f) regulates the Federal Highway Administration (FHWA) to assess the environmental effects of an action through the NEPA process. The FHWA is directed not to approve any program or project that requires the use of any publicly owned public park, recreation area, or wildlife or waterfowl refuge, or any land from an historic site of national, state, or local significance, unless there is no feasible and prudent alternative to the use and all possible planning to minimize harm resulting from such use is included. The environmental regulations for applying 4(f) to transportation project development are found at 23 CFR 771.135.

# 730. ALIENATION AND CONVERSION OF PARKLAND

If there is a possibility that an action involves alienation or conversion of parkland, it is advisable to consult with legal counsel to decide how to proceed. In most cases, the requirement to obtain legislative authorization for the alienation of parkland is found in case law, not statutes, with the exception of statutory requirements relating to specific State grants programs. New York courts consistently hold that land that is dedicated for park purposes cannot be conveyed or used for another purpose without an authorizing act of the State legislature.

Specific statutory provisions relating to the alienation of parklands that have received State grant funding or the conversion of parklands that have received federal funding are set forth in:

 Article 15 of the New York Parks, Recreation and Historic Preservation Law, the Park and Recreation Land Acquisition Bond Acts of 1960 and 1962.

- Article 17 of the New York Parks, Recreation and Historic Preservation Law, the Outdoor Recreation Development Bond Act of 1965.
- Title 9 of Article 52 of the New York Environmental Conservation Law, the Environmental Quality Bond Act of 1986.
- Section 6(f) of the Federal Land and Water Conservation Fund Act of 1965, P.L. 88-578.
- Environmental Conservation Law Section 56— 0309 (12) of the Clean Water/Clean Air Bond Act of 1996 prohibits the sale, lease, exchange, donation, or other disposal of land acquired, developed, improved, restored or rehabilitated for parks projects or use for other than public park projects without express authority of the State legislature. Legislative approval of an alienation will include specific requirements, such as substitution of property.
- Sections 432.4 and 432.5 of Title 9 of the New York Codes, Rules and Regulations ("NYCRR") set forth the procedures and requirements for alienation of Bond Act project parklands.

The City of New York Department of Parks and Recreation should be contacted to determine whether State or federal funds have been used in the development or acquisition of a public park. As stated previously in Section 210, if an action entails the use of parkland for a non-parkland purpose or the conveyance of parkland, the project sponsor should contact the City of New York Department of Parks & Recreation, Parklands Office as soon as possible, and review the "Guide to the Alienation" or Conversion of Municipal Parklands, available from the State of New York Office of Parks, Recreation and Historic Preservation. Contact information for the New York City Department of Parks and Recreation and the regional office for State Parks are included at the end of this Chapter under "Location of Information," Section 750.

#### 740. APPLICABLE COORDINATION

Coordination with other agencies and open space experts may be appropriate for gathering information needed for the CEQR review. In particular, coordination with the New York City Department of Parks and Recreation would be appropriate for proposed actions that occur on parkland or other public open space under its jurisdiction, or require mitigation for significant open space impacts that occur on parkland or other open space under its jurisdiction.

#### 750. LOCATION OF INFORMATION

For gathering open space information, many sources are available to lead agencies and CEQR applicants, including maps, property data, guidelines, reports, documents, files, and base maps on various parks and public open spaces.

Following is a list of agencies and contacts that have relevant information with respect to open space resources and policies.

 New York City Department of Parks and Recreation The Arsenal
830 Fifth Avenue New York, NY 10021

Natural Resources Group: 212-360-1417 Operations & Management Planning: 212-360-8234 Parklands: 212-360-3401 Planning: 212-360-3403

Operation Green Thumb 49 Chambers Street, Room 1020 New York, NY 10007 Phone: 212-788-8068

Department of Parks and Recreation, Operations and Management Planning, Parks Inspection Manual, City of New York, as amended.

Department of Parks and Recreation, Parklands, *Parkland Sectional Maps*, City of New York, reference material only. Provides delineated parkland on maps.

Department of Parks and Recreation, Parklands, *Property Lists*, City of New York, reference material only. Provides name of park, acreage, facilities within park, etc.

Department of Parks and Recreation, Parklands, "Property Folders," City of New York, reference material only. Provides real estate, historical, and natural history information.  New York State Office of Parks, Recreation and Historic Preservation NYC Office Riverbank State Park 679 Riverside Drive New York, NY 10031 Phone: 212-694-3722

Information available on New York State parks in New York City.

Office of Parks, Recreation and Historic Preservation, Guide to the Alienation or Conversion of Municipal Parklands, State of New York, Revised 1990.

Guidebook on the Alienation and Conversion of Parkland.

 New York City Department of City Planning 22 Reade Street New York, NY 10007 212-720-3300

Demographics Division: 1990 Census and demographic data. Population and age data available by census tract.

Waterfront and Open Space Division: information on parks and open space programs and policies. Book and Map Sales Office Hours: 10 AM –1 PM & 2 - 4 PM, Monday-Friday Phone: 212-720-3667

Information on public plazas.

Department of City Planning, Bytes of the Big Apple: Tax Block Base Maps in DXF Format, City of New York, March 1991.

Department of City Planning, Bytes of the Big Apple: Tax Block Base Maps in Illustrator Format, City of New York, June 1992.

Department of City Planning, *Bytes of the Big Apple: LION Single Line Street Base Map in MapInfo format*, on diskette, City of New York, March 1992.

Department of City Planning, Recreation and Open Space in New York City: Community Districts with Lowest Parkland/Population Ratios, City of New York, January 1992. Department of City Planning, A Greenway Plan for New York City, City of New York, Fall 1993.

Abeles Schwartz Associates, Inc., Open Space and the Future of New York: How to Analyze Community Open Space and Recreational Needs, The New York City Open Space Task Force, Department of City Planning, City of New York, 1988.

Department of City Planning and Department of Transportation, *New York City Bicycle Master Plan*, May 1997.

Information on designated greenways, existing and proposed.

Department of City Planning and Department of Transportation, NYC Cycling Map, 2001.

Maps showing recommended bike routes throughout the five boroughs.

Department of City Planning & Municipal Art Society: 2000 Study of Public Plazas.

New York City Department of City Planning Manhattan Office 22 Reade Street, 6th Floor New York, NY 10007 Phone: 212-720-3542

New York City Economic Development Corporation 110 William Street New York, NY 10038 212-619-5000

Information on the provision of open space in economic development projects.

 New York City Department of Housing Preservation and Development Division of Property Management 100 Gold Street New York, NY 10038 Phone: 212-863-7087

Information on open spaces in housing projects and on interim site improvements.

 New York City Board of Education Division of School Facilities 110 Livingston Street Brooklyn, NY 11201 718-391-6466 For public school playgrounds and open space or recreational facilities, requests can be made for square footage of specific sites. For jointly operated playgrounds (JOP's), which are operated by both the Board of Education and the Parks Department, contact the relevant Community School District Office for information on facilities, accessibility, hours of operation, etc.

 New York City Housing Authority 5 Park Place New York, NY 10007 212-306-3000

Information on the provision of open space in Housing Authority projects.

 Department of Citywide Administrative Services
Division of Real Estate Services
20<sup>th</sup> Floor, Municipal Building
New York, NY 10007
212-669-8888

Information on the short- and long-term leases of City-owned land for open space uses.

National Park Service
U.S. Department of Interior

Manhattan Site: 26 Wall Street New York, NY 10005 212-825-6990

Gateway National Recreation Area: Headquarters, Building 69 Floyd Bennett Field Brooklyn, NY 11234 718-338-3687

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