

### III. BUILT ENVIRONMENT

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#### **Vision Statement**

*This Plan envisions Burlington as a city where...*

*...Burlington's built environment reflects a legacy of a rich architectural heritage, moderately scaled buildings, and high quality urban design. The unique design characteristics of each neighborhood have been retained, while new construction and public investment respect the city's historic character and demonstrate high quality architecture while effectively meeting the demand for continued growth. In higher density areas, buildings are closer to the street, with parking underneath or in a nearby structure. All buildings and public facilities are welcoming to people with disabilities. Both new construction and renovations to older buildings illustrate a commitment to sustainable development practices with the use of green building materials and energy efficient design. The streetscape is clean, well maintained and lined with shade trees. Overhead utilities have been relocated underground, and excessive street lighting has been eliminated. Important view corridors and scenic vistas have been retained, and developed areas are complimented by open spaces, parks, and natural areas.*

#### **CITY POLICIES**

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THE CITY OF BURLINGTON WILL...

- **Protect its scenic views and view corridors, and encourage development that compliments Burlington's natural setting.**
- **Retain its moderate scale and urban form in its most densely developed areas, while creating opportunities for increased densities.**
- **Conserve the existing elements and design characteristics of its neighborhoods, and maintain neighborhood proportions of scale and mass.**
- **Retain and enhance Burlington's historic buildings and architectural features.**
- **Encourage new land uses and housing designs that serve changing demographics and benefit from new technologies where appropriate.**
- **Enhance the City's gateways and streetscapes.**
- **Protect, maintain and enhance the City's urban forest.**

- **Enhance the pedestrian experience by improving opportunities for pedestrian access and interaction throughout the city.**
- **Strengthen the City’s role as a cultural and arts center, and support efforts to introduce public art into the city’s built environment.**
- **Ensure people with disabilities have equal access to the built environment.**
- **Ensure building design and public amenities take into account Burlington’s northern climate.**



## INTRODUCTION

Burlington's **built environment** - its buildings and structures, and how they relate to the city's landscapes, layout, and history - make Burlington the special place it is. The city has a rich architectural legacy, set within an exceptional natural setting, that provides the foundation to its vital economy, human-scale environment<sup>1</sup>, and high quality of life. As Burlington continues to grow, we must conserve and build upon this legacy through careful planning and high quality urban design. The following section outlines Burlington's policies and priorities for maintaining and enhancing the quality of its built environment.

### Respecting Our Natural Setting

With Lake Champlain and the Adirondacks to the west, the Green Mountains to the east, and the embrace of the Winooski River along our northern boundary, Burlington is blessed with an outstanding setting. Throughout the city - at the end of streets, from parks, offices, and homes - significant views are provided of the lake, river, mountains, forested and natural areas, and prominent building landmarks. Burlington is in the fortunate position of being able to blend urban amenities with a beautiful natural setting. The City must take full advantage of this setting by identifying and protecting view corridors and important scenic views for all to enjoy - today and tomorrow. A plan for identifying and protecting views of important visual landmarks and landscapes from public vantage points must be undertaken as the City contemplates opportunities for future higher-density development.



Lake Champlain & Adirondacks

Burlington's built environment must be respectful of the city's natural environment. While city ordinances allow for development at particular densities, design review regulations require that development consider the capacity and context of each individual site. The City should amend Article 30 of the *Burlington Zoning Ordinance* to include a definition of "Buildable Area" for the purposes of calculating allowable density in certain parts of the city. The "buildable area" would be limited to only that portion of a property suitable for the construction of structures or other forms of land development, and exclude such areas that are: underwater or subject to flooding, slopes greater than 30%, and lands within the right-of-way of an existing or proposed public street.

<sup>1</sup> "Human-scale" refers to the size, shape, and proportions of the built environment as perceived by, and in relation to, a pedestrian on the street. While different for different people, an object is considered to be of a human-scale when it appears measurable to the observer and its detail can be appreciated in relation to its overall mass. This is in contrast to an object or space that take on an awesome or super-human size due to its size and/or distance to the observer. (Lynch, Kevin. *Site Planning*).

Designated growth centers and activity zones such as the downtown, neighborhood activity centers and institutional campuses would be exempted from such a provision however, as they are places where higher density development is desired and encouraged. Offering density bonuses for the protection of important resources and sites could also be considered. Natural buffers and landscaping, including trees, shrubs and flowerbeds, should be used extensively to ease the transition between the built and natural form of the city. The use of green building materials and energy efficient design will help us to reduce our long-term impact on our environment. (See also the Energy section of this Plan)

## A City Built for People

Burlington is a city built for people to experience on foot. Its buildings, streets, and layout are at such a scale that people feel comfortable in the built environment. Most places are within walking distance, buildings do not overwhelm the landscape or the streetscape, throughout much of the city distant views are limited only by topography and vegetation; buildings offer a personal connection to the street. To maintain this scale and character:



- Most buildings in high density areas should be no taller than six to eight stories, and should make the most effective use of the site. Building height is based on its location (both individual site and context) and function.
- Mixed-use development should occur in concentrated areas within walking distance of higher densities.
- In higher density areas, buildings should be closer to the street, with uses and entrances at the street level that invite pedestrian activity. Transitions between high density and low-density areas should be gradual. Access to light and air is maintained, while care is taken not to cast large shadows over nearby buildings and alter wind patterns.
- Buildings and public amenities should be designed with Burlington's northern climate in mind, and embrace all of Burlington's seasons.
- The massing and design of large development projects should be subdivided so that the widths of the facades are compatible with the scale and patterns of their surroundings. Building facades should be articulated along the street, and punctuated with windows, bays, balconies, and other openings.
- Adequate green space and amenities should be provided to encourage people to be outside enjoying the city year round. This includes the creation of rooftop gardens, a system of trails and paths, and a network of publicly conserved open spaces.

- People should be able to move safely and conveniently throughout the city without the need for a car on a network of sidewalks and paths.
- Streets should be easy to cross, with signals, signs, and crosswalks designed to enhance the pedestrian experience.
- Benches, bike racks, trash and recycling containers, public phones, public rest rooms, information kiosks, public art and drinking fountains should be added to popular outdoor gathering spaces.

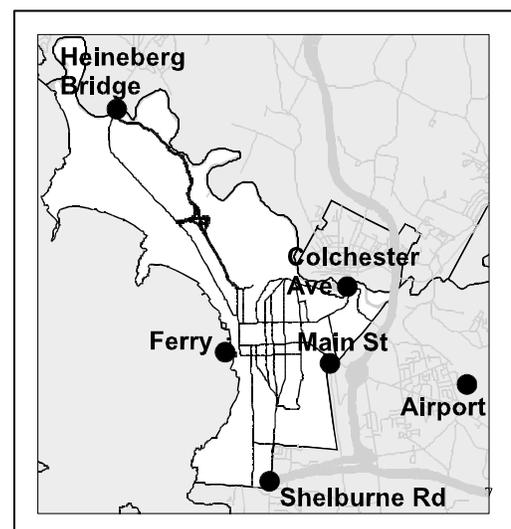
### ADDING UP THE DETAILS

**Public:** The City's public investment in its infrastructure includes thousands of small details: street lighting, manhole covers, catch basins, curb and ramp details, sidewalk paving textures, street trees, utility lines, benches, fire alarm boxes and hydrants, traffic signs and signals, fencing, parking meters, and many more. The cumulative effect of these details, in conjunction with more substantial investments in public buildings and spaces, defines the standard of quality for Burlington's built environment. Public buildings should set an example by defining a new standard for high quality architecture, creative site planning, energy efficiency, and green building techniques, and public projects should receive the same level of review for possible impacts on the built and natural environment that private projects receive.

**Private:** New construction and building renovation include numerous details that impact the design quality of the city. Gas, water, and electric meters, electrical transformers, heating, ventilating and air conditioning equipment, mailboxes, handicapped access ramps, refuse and recycling facilities and other service features can seriously detract from a building's appearance if not properly located or screened. While the nature and purpose of such equipment imposes certain requirements on their location, these details are often added to a building at the end of the process - leaving few creative options. Whenever possible, these service features should be integrated into building and site design from the beginning so as not to distract from the quality of a building or its site.

### GATEWAYS

“You never get a second chance to make a good first impression.” Gateways create a sense of arrival for those entering the city or neighborhood within it, and set the tone for what's to come. This feeling can be created with appropriate signs and landmarks, plantings, burying utility lines, protecting important views, and using distinctive pavement and architectural elements at intersections. Each gateway to the city or its neighborhoods should reflect the particular characteristics of its setting and provide a welcoming introduction. The City should take active steps to enhance the primary gateways into the city.



## **PUBLIC ART**

Public art enhances the overall quality of the built environment. Examples of public art can be found throughout the city. Whether it is a mural on a downtown building wall, a sculpture in a park, or unique architectural details on a building, public art personalizes the city and offers seeds for conversation and contemplation.

Public art also includes performance art. Street musicians, jugglers, dancers, and magicians add vitality, activity, and a sense of community. Diverse offerings of public art should be encouraged and celebrated as distinctive elements of Burlington's quality of life.

## **CULTURAL FACILITIES**

Cultural facilities for the visual and performing arts are an important aspect of Burlington's life and economy. From major events like the Discover Jazz Festival and First Night Burlington, to poetry readings at small coffee houses and paintings displayed in storefronts, the arts provide cultural vitality to the city as well as fulfill a growing economic niche. The Flynn Theater, with a seating capacity of 1,400, contributes over \$7 million to Burlington's economy each year. Memorial Auditorium, operated by the City, provides seating for 2,500 for concerts and sporting events. Several other small facilities are dispersed throughout the city and help make the arts a part of everyday life.

In addition to upgrading and maintaining existing facilities, additional performance and exhibition space will be needed to provide opportunities and affordable venues for artists. Needs include not only additional physical space, but also the associated equipment and infrastructure necessary to ensure the viability of existing and future venues.

Studies have identified the following needs:

- Continued improvements to Memorial Auditorium and the Flynn Theater.
- A small or mid-sized theater (less than 300 seats).
- Dance space for rehearsal and small performances.
- A medium to large multi-exhibit art gallery and exhibition space.
- Small gallery and exhibition spaces in the downtown and on the waterfront

The City should also investigate the best methods for linking important cultural facilities such as Memorial Auditorium, City Hall's Contois Auditorium, and the Flynn Theater along with related land uses such as restaurants and galleries. Improved linkages, whether in the form of a downtown cultural/arts district or simply a centrally located arts information kiosk, would help bolster this important segment of the downtown economy.

## **BURLINGTON AS AN ACCESSIBLE CITY**

To have equal opportunity, all people with disabilities must have equal access to the built environment. Many people think accessibility refers only to wheelchair access. But it also includes access for people with sensory and other mobility impairments. Equal opportunity for people with disabilities means:

- doors that open easily and ramps that are not too steep.
- signs at appropriate heights that are large enough to read
- accessible parking spaces, telephones, and transportation.
- convenient and accessible public rest rooms
- accessibility to the arts and cultural opportunities
- accessibility to the public decision-making process.

Burlington is committed to removing barriers within the built environment that hamper people with disabilities. This Plan proposes that the City establish a “disability-friendly” approach whereby new developments and building renovations, both public and private, are encouraged to go beyond the minimums established by regulation and pursue innovative ways to enhance convenience and accessibility for all residents with disabilities.

### **A NORTHERN CLIMATE**

Burlington is a northern city, with frequent cold spells and large amounts of snow. While this is easy to remember in December or January, it can be forgotten during warm and sunny summer days. It is important that buildings, courtyards, and public amenities (such as bus shelters) be designed to provide refuge from the elements and remain inviting year-round. Protection from wind, cold, rain, snow, and ice should be important design considerations. Building design must also take into account how it may influence the microclimate by casting long shadows or modifying wind patterns. Mature trees can provide summer shade and shelter from winter winds.

Mixed-use districts, and the location of convenience stores and other local services close to residential neighborhoods, can also make life easier during the winter, especially for residents without an automobile. Priority must also be given to ensuring that snow and ice accumulation on sidewalks is cleared promptly.

Most importantly, the City must embrace all four seasons, and design should facilitate the public’s enjoyment of each. Using color, vegetation, natural light, and providing opportunities for shelter and shade, creative design can take advantage of the best that each season has to offer.

### **Streetscape<sup>2</sup> Design**

One of the most important factors affecting the quality of urban life is the character of city streets. Crucial to a street’s character are such things as building heights and setbacks, the planting of street trees, presence of overhead utilities, quality of street lighting, and the design quality of the “street furniture.”

It is important to establish appropriate setback requirements for buildings. Consistent front and side yard setbacks along a street helps creates a building edge and a well-defined public space. Buildings in commercial and higher density areas should be built

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<sup>2</sup> Streetscape refers to the visual image presented along a street including the combination of buildings, street, parking, trees, signs, furniture, utilities and other hardscape features.

closer to the sidewalk to provide an urban character. Moreover, in industrial and commercial areas, off-street parking should not be allowed directly in front of buildings. In residential areas, front yards, porches, and building facades should be the predominant visual element along the streetscape, and garages and driveways should play a minimal role.

The following approaches will improve the quality of the streetscape:

- New buildings or additions on any given street should be consistent with the predominant setback pattern for that street.
- Especially in downtown and commercial areas, setback requirements should reinforce an urban and pedestrian streetscape by being closer to the sidewalk.
- Street-level store fronts and building entrances should be open and inviting to pedestrians, and service entrances, driveways and garages should be located on side streets or in service alleys.
- The scale and massing of buildings on any given street should be harmonious. This does not mean uniform however. Variations in scale and design are an essential factor in creating a distinctive built environment.
- Street width should be appropriate to the type and character of land uses found along the street.
- Where streets have more pavement than necessary, excess pavement should be replaced by green areas, sidewalks, or other appropriate public amenities.

The City needs to undertake a public design process to identify and outline future design characteristics of the public rights-of-way. This process should serve to help answer the following:

- What is our objective for the City's public rights-of-way?
- How do we want our public rights-of-way to function and to look like?
- What is the design/aesthetic objective we have for a particular street, corridor, gateway, or neighborhood?

The City's *Street Classification System* offers a simple framework to begin working from where function, service, and design objectives for each category are defined and articulated. (see also the *Transportation System Plan* section of this plan)

## **STREETS AS PUBLIC PLACES**

While not all streets can be as inviting and accessible to the public as the Church Street Marketplace, the pattern of streets, paths and pedestrian amenities should make walking safe and easy in all areas of the city. Residential and commercial areas should be active public places where social interactions are encouraged. People should be able to stroll, sit, pass through, look around, walk around, and enjoy neighborhoods, shopping areas, and conservation areas. Increasing pedestrian activity improves business by increasing traffic passing by storefronts, improves public safety by placing more eyes on the street, and benefits our sense of community by facilitating communication and interactions between neighbors, business owners and visitors.

## LOCATING UTILITIES



Overhead utilities - including electric, telephone, and cable - present a dominant visual element throughout many parts of the city. This is especially concerning where street trees and other streetscape improvements are desired to make parts of the city more inviting for development and pedestrians or to preserve or enhance important viewsheds.

Many large trees have been radically pruned to accommodate power lines. Indeed, the vistas along many of our city streets are more strongly characterized by the march of utility lines than the promenade of trees. This is particularly unfortunate along streets such as Pearl and College that have important views of Lake Champlain.

While too expensive to accomplish everywhere, there are parts of the city where placing overhead utilities underground, or relocating them behind buildings, must be an important design consideration. In addition to all new development, priority should be given to undergrounding overhead utilities in the Downtown Waterfront, the North Street Commercial District, Riverside Avenue, North Winooski Avenue, streets that offer important view corridors to Lake Champlain, and the main approaches into the city.

## STREET TREES

An essential feature of a healthy and attractive urban environment is the presence of trees - along the streets and in public parks and private yards. More than simply an aesthetic amenity, trees in the urban environment stabilize soils, provide a filter for surface runoff and air pollutants, shade summer sun, block winter winds, muffle sounds and provide habitat and refuge to birds and other small animals. The main objectives of Burlington's urban forestry program include maintaining existing public trees (numbering approximately 8,000) and planning for the creation of a sustainable urban forest through the City's tree planting program. (see also the *Community Facilities and Services* section of this Plan)

Sustaining Burlington's urban forest into the future will require a consensus regarding the goals and design objectives for the urban forest, and an understanding of the conditions necessary for a tree to survive in an urban environment. Poor soil conditions, road salt, auto emissions, and overhead and underground utilities all work against street tree survival under urban conditions.

The Department of Parks and Recreation has a *Street Tree Planting Plan* as a component of an *Urban Forest Master Plan*. In addition to inventorying assessing the condition of existing trees, the Plan articulates city-wide objectives for public trees, identifies future planting sites, lists appropriate species for re-planting, establishes site planning guidelines, and explores opportunities and mechanisms for planting on private property to expand possible planting sites within the streetscape. Most importantly, it outlines a plan for maintaining the existing street tree population with annual budget recommendations and proposed work schedules for pruning.

## **STREET AND SITE LIGHTING**

Recent expansions in the use of exterior lighting have resulted in a marked increase in overall lighting levels within the city. While originally intended to reduce energy use and improve security, the use of high-pressure sodium lighting - in combination with new styles of fixtures - has had several unintended results. These include a distortion of natural colors, excess brightness, glare spilling onto adjacent properties, and an obscuring of the night sky known as “sky glow” which affects not only Burlington, but neighboring communities as well.

Recognizing these issues are common in other areas, and pose impacts regionally, the City participated in a site lighting study in cooperation with the Chittenden County Regional Planning Commission. The purposes of the study were to develop information on lighting issues and technology, and to establish a set of lighting guidelines that will help Burlington and other communities in the review of new lighting installations. Issues of particular importance in Burlington include:

- Overall illumination levels are too high.
- Concern about the visual quality and color distorting properties of high-pressure sodium lights.
- Glare from unshielded or misdirected fixtures.
- Improving the quality of outdoor lighting to improve public safety and perceptions of security.
- Unnecessary illumination of building facades.
- Design quality of fixtures and poles.
- Desire for complementary fixture designs in different types of settings and neighborhoods.

Recommendations resulting from this study - including the use of cut-off or shielded fixtures; lower wattage bulbs; color corrected or other acceptable light sources; and fixtures and pole heights which are appropriate for the site and neighborhood - will be evaluated for inclusion in the city’s zoning guidelines and utilized by all city departments in the review of lighting installations. Additionally, there is an inherent conflict between street trees and street lighting, and locations of trees and lighting should be coordinated between Parks & Recreation and BED early in the planning and design stage of a project.

## Built Environment Action Plan

Action Item	Lead Agency	Secondary Agencies
Evaluate the options and opportunities for increased development density and building height within the Downtown area, Neighborhood Activity Centers and other city growth centers to enable significant future growth without harming the scale and character of the city and its historic resources and scenic views.	Planning & Zoning	CEDO
Extend the use of floor area ratio (FAR) as a measure of development density beyond the CBD and Transitional Zones.	Planning & Zoning	CEDO
Amend Article 30 of the <i>Burlington Zoning Ordinance</i> to include a definition of "Buildable Area" for the purposes of calculating allowable density in certain parts of the city.	Planning & Zoning	CEDO
Identify important scenic view corridors and points of interest and ensure their protection in the Zoning Ordinance, especially from public places such as primary streets and parks.	Planning & Zoning	Parks & Rec.
Undertake a public design process to identify and outline future design characteristics of the public streetscape.	Public Works Parks & Rec.	Planning & Zoning CEDO
Revise Burlington's Subdivision Ordinance and street design standards to ensure that the width and design of each street fit its function and location.	Public Works	Planning & Zoning
Develop a comprehensive street lighting plan and site design standards.	Planning & Zoning BED	Public Works
Develop conceptual guidelines to define gateways through the use of signs, plantings, architectural landmarks and other design features.	Planning & Zoning	Public Works
Define north/south and east/west mid-block pedestrian pathways connecting the Central Business District and the surrounding neighborhoods.	Planning & Zoning	Public Works
Modify the Zoning Ordinance's Design Review criteria to ensure building development take into account Burlington's northern climate	Planning & Zoning	BED

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Develop criteria and guidelines for use of sustainable building technologies.	Planning & Zoning	
Evaluate the feasibility of linking cultural facilities through the use of a downtown cultural /arts district or through a centrally-located arts information kiosk	City Arts	Planning & Zoning
Develop a Percent-For-Arts Ordinance for public buildings.	City Arts	Treasurer's Office

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