

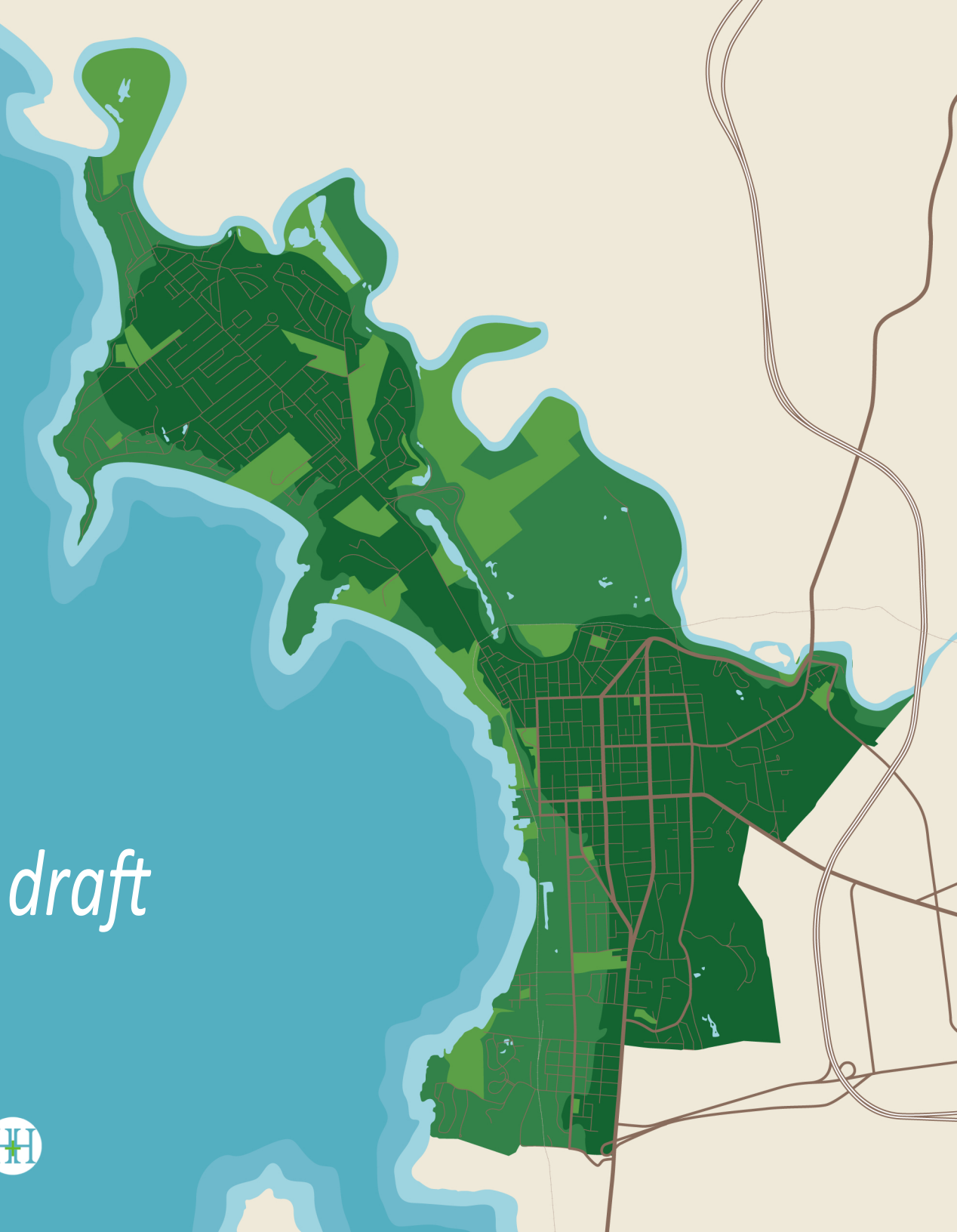
# THE BURLINGTON VERMONT PARKS & RECREATION MASTER PLAN

*executive summary draft*  
MAY 2014



BURLINGTON  
**PARKS  
RECREATION  
WATERFRONT**

S A S A K I





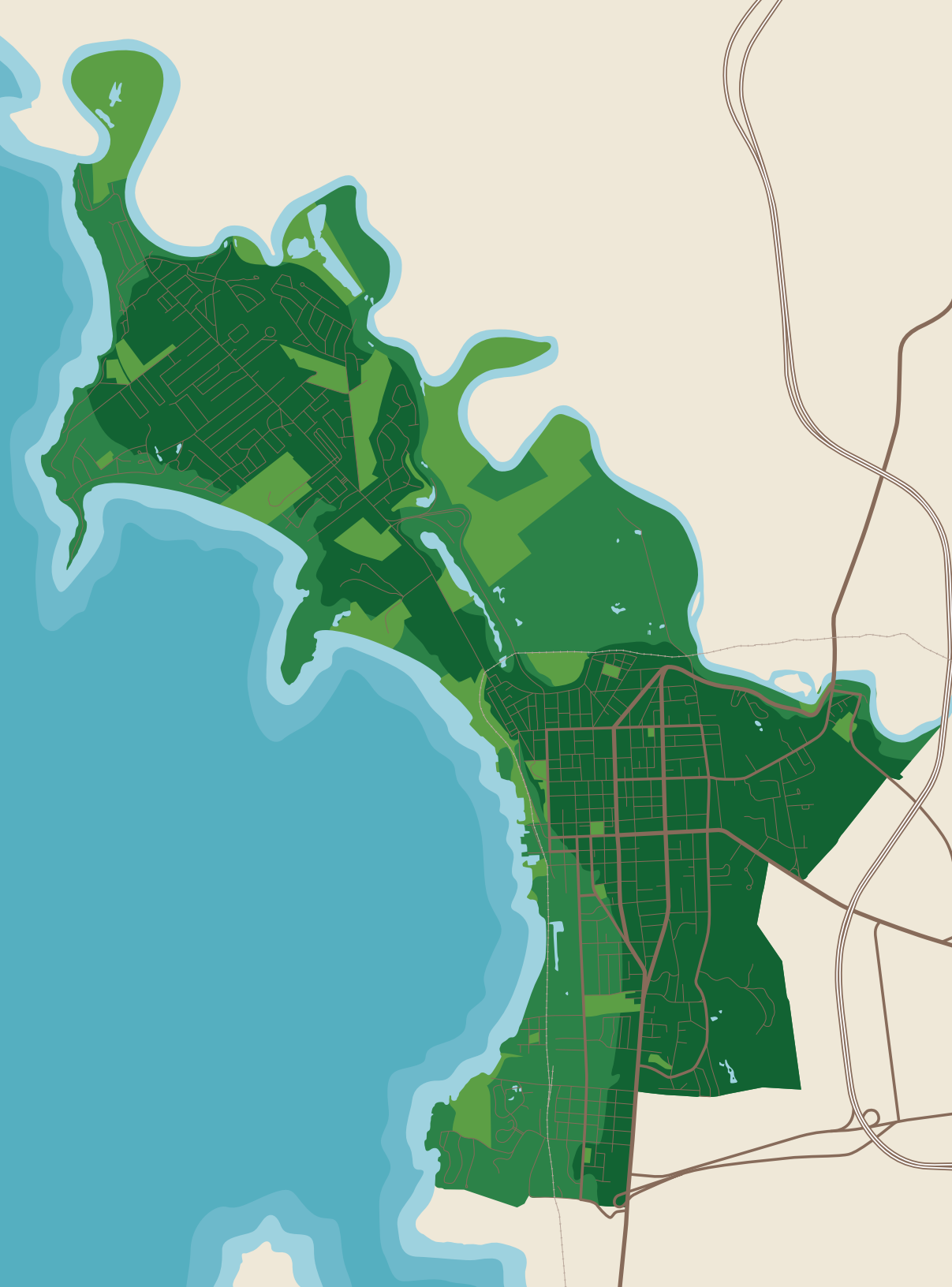
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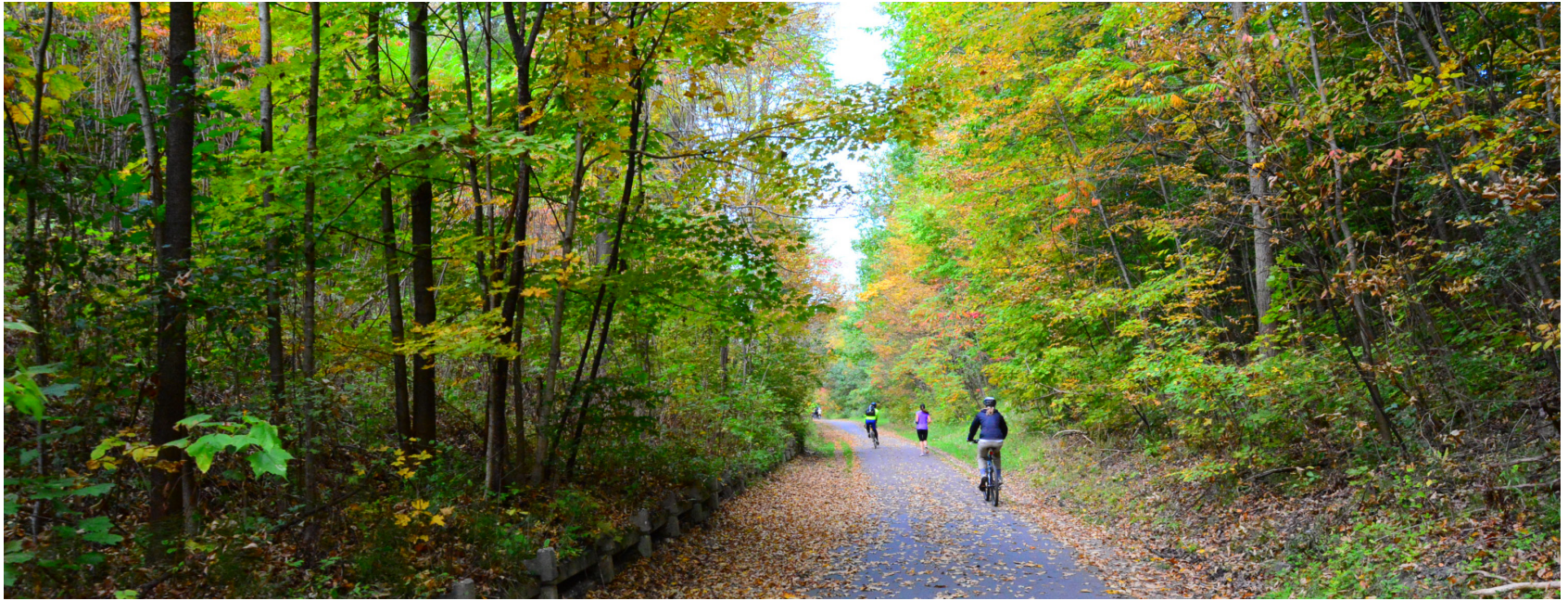
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# WHY THIS PLAN NOW?

Fresh vision and collaborative approach

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Burlington Vermont's diverse system of parks, trails, open spaces, and recreation spaces serve myriad roles for the city. Today, the waterfront parks serve as a source of pride for residents, the community gardens as a gathering space for new members of the community, and the urban wilds as a reminder of the city's commitment to sustainability and an environmental ethic. The 2014 Parks and Recreation Master Plan seeks to honor and enhance the role of Burlington's parks and recreation spaces within the city, and the region. An engaged, collaborative process ensured that community input influenced the ultimate vision and recommendations. The plan focuses on a set of five themes which are summarized in this document:

1. Meeting the needs of the community
2. Inclusive social spaces
3. Connected parks and neighborhoods
4. Programming and operations
5. Sustainability and stewardship

## CONTEXT FOR THE PLAN

Burlington's Parks and Recreation Master Plan is well positioned to create a lasting impact on the city and the department. The plan has been undertaken in a moment of new leadership, recent planning achievements, and a strong potential for action and implementation.

The Parks, Recreation and Waterfront Department is poised at a moment of change and transformation - seeking both to build on the park system's strong legacy and to create a fresh start that aligns with twenty first century goals and ambitions. With recent momentum around the Plan BTV master plan for downtown and the waterfront and a collective, community appreciation for the richness of Burlington's parks, the parks and recreation master plan attempts to create an achievable set of actions to guide the department for the next decades. The plan is intended to help the department efficiently maintain its assets, strive for sustainability, and set design aspirations to create better social spaces for Burlington's role as the urban heart of the state.

Key leadership positions within and in coordination with the Parks, Recreation and Waterfront Department have been recently filled by fresh voices. The plan takes advantage of this new perspective, aiming to create a unified voice for the multiple roles that parks fill in contemporary cities. At the same time, the plan coordinates with the many related activities going on in the city, from implementation of Plan BTV to the community engaged PIAP process to re-design of the waterfront bike path. The expansive role of parks in Burlington's urban environment is described on the next pages.

# CULTURE



## Regional Destination and Local Pride

As the state's most populated city, Burlington plays an important role as the urban and civic heart for the region. Its parks and recreation offerings reinforce this role through their physical attributes and programming. For residents and visitors, Burlington's parks are important social gathering spaces in the city, playing host to concerts on the waterfront, farmers' markets for downtown employees, and a means to access the city's generous waterfront for all who visit.

# COMMUNITY



## Diverse Community

Burlington's population grew nearly ten percent between 2000 and 2010. This growth was coupled with increasing racial diversity and projections for a growing senior population. At the same time, four educational institutions make their home within the city, enrolling 10,163 in 2000 and growing. This creates vitality and a core of young adults, but also puts pressure on quality of life in some neighborhoods. In the coming years, the parks and recreation system needs to evolve to changing trends, ensuring the system remains relevant to all, supporting families, seniors, and students alike, and creating inclusive spaces where all are welcome.

# ECONOMY



## A Wise Investment in Burlington's Future

A framework for a park system with a strong identity and enduring amenities provides a foundation for Burlington to catalyze new investment and foster long-term growth. Economists in the United States and abroad are recognizing the dollar value of urban open spaces and recreational amenities in terms of adjacent land values, tax revenues, health and recreation benefit. As the city reinvests in its open spaces, from City Hall Plaza to the waterfront bike path or marina, it is reinforcing its competitiveness and ability to continue to attract and retain a skilled workforce through a high quality of place.

# ECOLOGY



## Burlington's Green Infrastructure

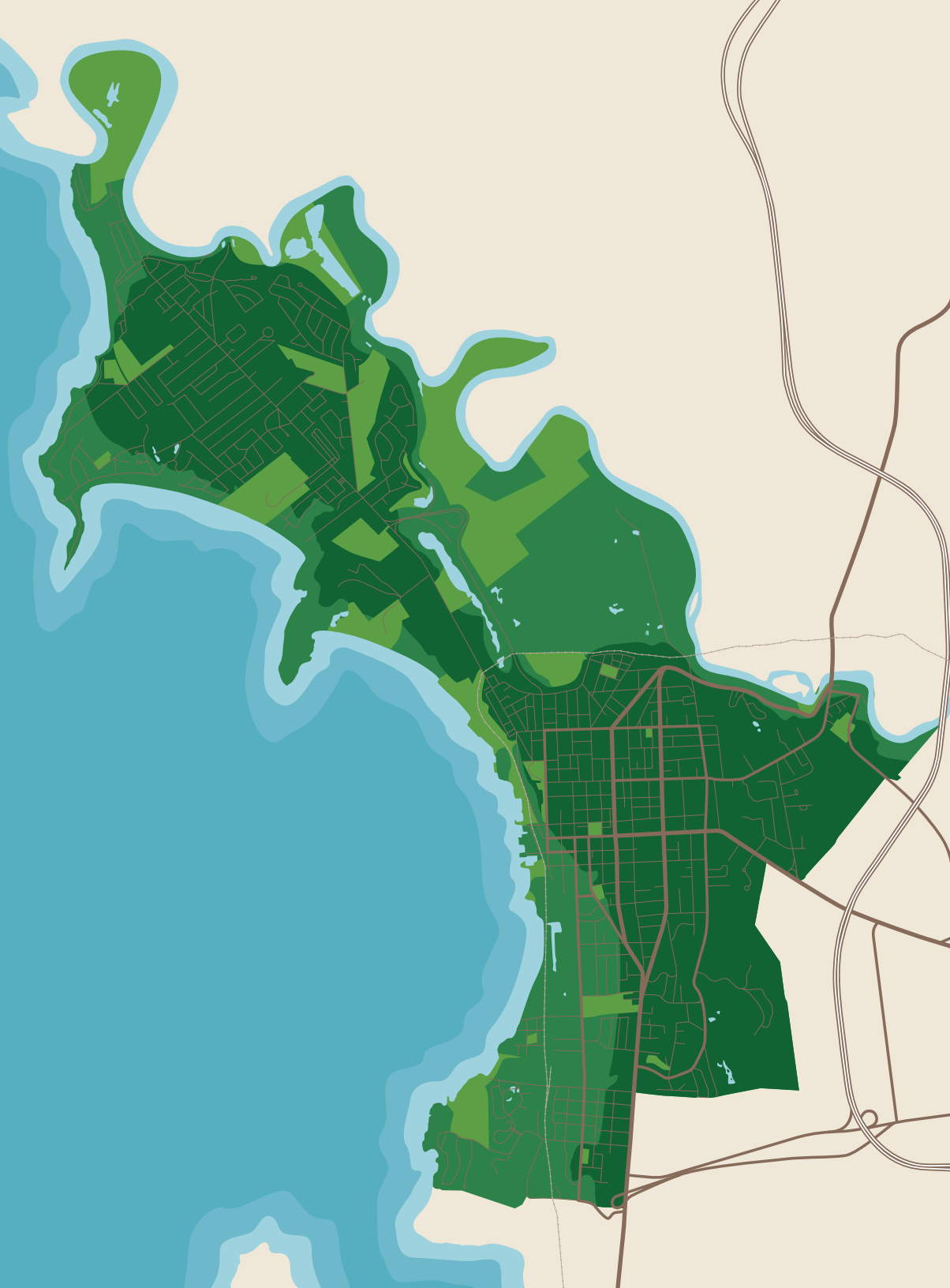
Burlington's parks and greenways perform essential ecological functions for the city. Trees reduce water and air pollution and their shade helps mitigate urban heat island effect. Along waterfronts and other floodplain areas parks capture stormwater runoff, prevent soil erosion, and reduce the impact of floods. Parks and greenways provide habitat and migration routes for wildlife, which strengthen species resilience and foster biodiversity. Lastly, when city residents have access to environmental education opportunities in natural areas they form a personal connection to the natural world from which they often feel isolated.





# THE VISION

*"I have never been more excited about the future of our great City." - Mayor Miro Weinberger*



# CREATING A SHARED VISION

## PROJECT TIME LINE

The 2014 Burlington Parks Master Plan is the first Master Plan for the Burlington Parks and Recreation Department. The Plan provides a framework for decision making for future service delivery and resource allocation. The planning process began in May 2013 and concluded in February of 2014. The Plan creates a vision for a 10 year period, 2014 through 2024.

The planning process began with an in depth analysis of the City's park system, including a comprehensive inventory of the park amenities. In concert with this physical analysis, the team studied the existing framework of planning documents in place. Next, a statistically valid household survey was sent to the community. There was a high level of participation with nearly 28% response. The planning effort concluded with a visioning session with department staff. The result of the visioning session forms the final framework for this master plan.

## OUTREACH STRATEGY

An ongoing component of the Master Plan development was the community input process, which included a series of public input methods. These methods ranged from an online mapping survey that led to suggestions for improvement from the public; a community bike ride, a household survey, and three public meetings.

Internal departmental engagement with the plan was also critical. Throughout the process parks and recreation staff, key leaders, and city administration participated in multiple ways. Burlington staff members joined a series of focus groups early in the process, and interviews with community groups supplemented the feedback. The input and review summary used to influence ideas for future programming and facility opportunities, potential partnerships, opportunities for improvement, and challenges the Department will face in the next five years.





**Right & Bottom:**  
In collaboration with the Mayor, Parks and Recreation Department, and a Bike Path Consultant Team at VHB, the master plan team led a public tour of the bike path to discuss the future design of the path and its integration with major city parks.



**Far right:**  
The master plan team met with Parks and Recreation staff to learn how the plan's recommendations can improve daily operations.



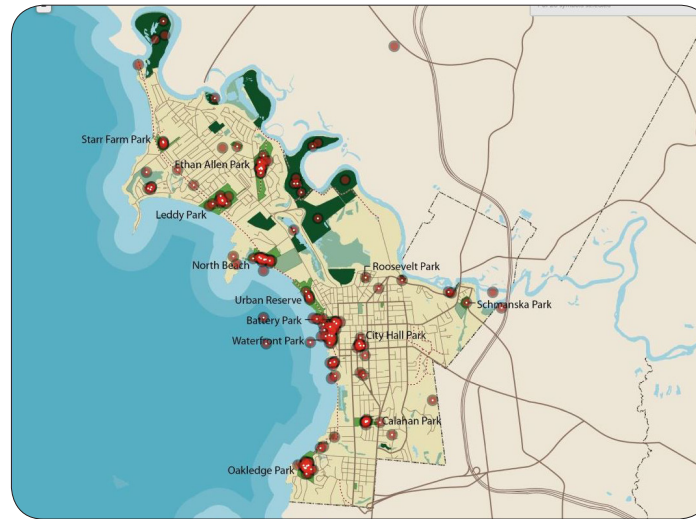
# SURVEY INPUT

## HOUSEHOLD SURVEY

A statistically valid community survey was administered to help identify community priorities and guide recommendations for resource allocation or recreation management. The survey was conducted by phone and mail and given to a random sample of 2,000 people. The survey assessed satisfaction levels, facility use information, program and facility needs, and use of the parks and recreation programs. Over 550 households returned the survey, which exceeded the minimum number of surveys required for meaningful analysis, yielding a 95% confidence level. Some of the key findings include ...

## ONLINE MAPPING TOOL

The statistically valid household survey was complemented by the launch of an online mapping tool, which invited community members to weigh in qualitatively on the park system. Community participation in the “MyBurlington” survey remained lower than the household survey, reaching 70 by the end of the project. However, the data received helped to illuminate issues within individual parks and reinforced the strength of the waterfront.



Left:

The MyBurlington mapping tool generated maps of resident feedback. This map shows the parks visited by respondents in the past 12 months.



Left:

The MyBurlington online interface was easy to use with drag-and-drop icons. The thumbs up and thumbs down option was intended to build on the PIAP online feedback interface.

**TOP 3**

FACILITIES USED IN  
THE PAST YEAR

1. LAKE VIEWS
2. BIKE PATHS
3. BEACHES

**550**

OUT OF

**2000**

HOUSEHOLDS  
REPLIED TO THE  
SURVEY

VIEWS, PATHS, BEACHES, EVENT SITES, PICNIC  
AREAS, SHELTERS, & PLAYGROUNDS

TOP THE LIST OF POPULAR FACILITIES.

PARTICIPATION IN REC

PROGRAMS IS DRIVEN BY:

***LOCATION, QUALITY  
OF INSTRUCTORS,  
& TIME***

ME TOO!

SAME HERE!

YEAH!

YES PLEASE!

RIGHT ON!

EXACTLY!





# 5 SYSTEM THEMES

The Master Plan process resulted in the development of overall system themes, or key areas of focus and recommendations for the next 10 years.

## 1 MEETING THE NEEDS

Both Gaps And Surpluses Were Identified In The Planning Process. Gaps Include Specific Sports Facilities, Indoor Recreation Space And Participation In Recreational Programming. This Plan Identifies Strategies To Address Current Need And Recommends A Future Process To Adapt To Changing Demographics.

## 2 INCLUSIVE SOCIAL SPACES

The Parks and Recreation Department has a significant role in creating opportunities for people to gather and interact, an especially important function given the city's role as a regional cultural hub. This is aligned with themes from Plan BTV and the Chittenden ECOS Plan of Sense of Place and Social Community.

## **3 CONNECTED PARKS + NEIGHBORHOODS**

Burlington has adequate total park acreage, but not all types or neighborhoods are well served. The majority of the city has access to a park within a 10 minute walk, however there is limited access in wards one and six. This plan seeks to better link parks into the existing trail system and build on the existing trails.

## **5 SUSTAINABILITY + STEWARDSHIP**

Urban parks offer more than simply a place to play and relax. As cities grow greener, the study and management of urban ecologies is becoming critical to understanding the way natural systems interact with the built city. This plan addresses stormwater and maintenance practices as critical to the long-term sustainability of the park system.

## **4 PROGRAMMING + OPERATIONS**

Burlington is an active community with a robust recreation and programming component, yet participation in available programming lags behind national averages. This plan addresses both the tailoring of programming to community need as well as the need increased visibility, marketing and communications.

# MEETING THE NEEDS

For the City of Burlington and the Region

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## BURLINGTON'S PARK RESOURCES

Burlington is home to approximately 520 acres of City owned and operated parks. This translates to 12.2 acres per thousand residents, which is just above the national standard of cities with a similar population (12 acres per thousand residents). Most of the City's parkland (55%) is within large regional parks like Oakledge and Leddy. The remaining acreage is in community parks (32%), neighborhood parks (13%) and mini parks (<1%). Ideally, neighborhood parks would represent a larger percentage of the overall parkland (29%), but regional parks like Ethan Allen Park serve double-duty as neighborhood parks by offering amenities like playgrounds. Overall, Burlington has a robust and diverse park system.

## LEVEL OF SERVICE

Park amenities are the built elements within a park that support various forms of recreation (both active and passive). For many users these are the primary reason they visit parks. It is critical that the parks supply the right number and types of amenities to meet the needs of their users. Additionally, as the demographics of a city change over time (race, age, population, etc) park amenities need to be assessed for their relevance to the changing user groups. Level of Service (LOS) standards provide metrics for this assessment.

## SURPLUS AND DEFICIT

The primary gaps in service are in field sports, specifically adult baseball, adult softball and regulation size soccer/football/lacrosse, and indoor recreation such as a fitness center and indoor swimming. Providing additional amenities will require careful planning and design - and should be proactive about anticipating future demographic changes.

Several amenity types are in surplus. The significance of such a surplus varies by amenity. Community gardens, for example, reflect the culture of local food production that is central to the Burlingtonian psyche. In fact, there is capacity for additional community gardens in the future. On the other hand, the surplus of outdoor tennis courts indicates an inefficient use of resources to maintain under-used amenities.

**Table (Right):**  
The level of service standards were generated by benchmarking Burlington against 112 peer cities (populations between 25,000 - 75,000). The benchmarks were then adjust to reflect Burlington's unique population



**Photo (Left):**  
The Calahan Park Community Garden

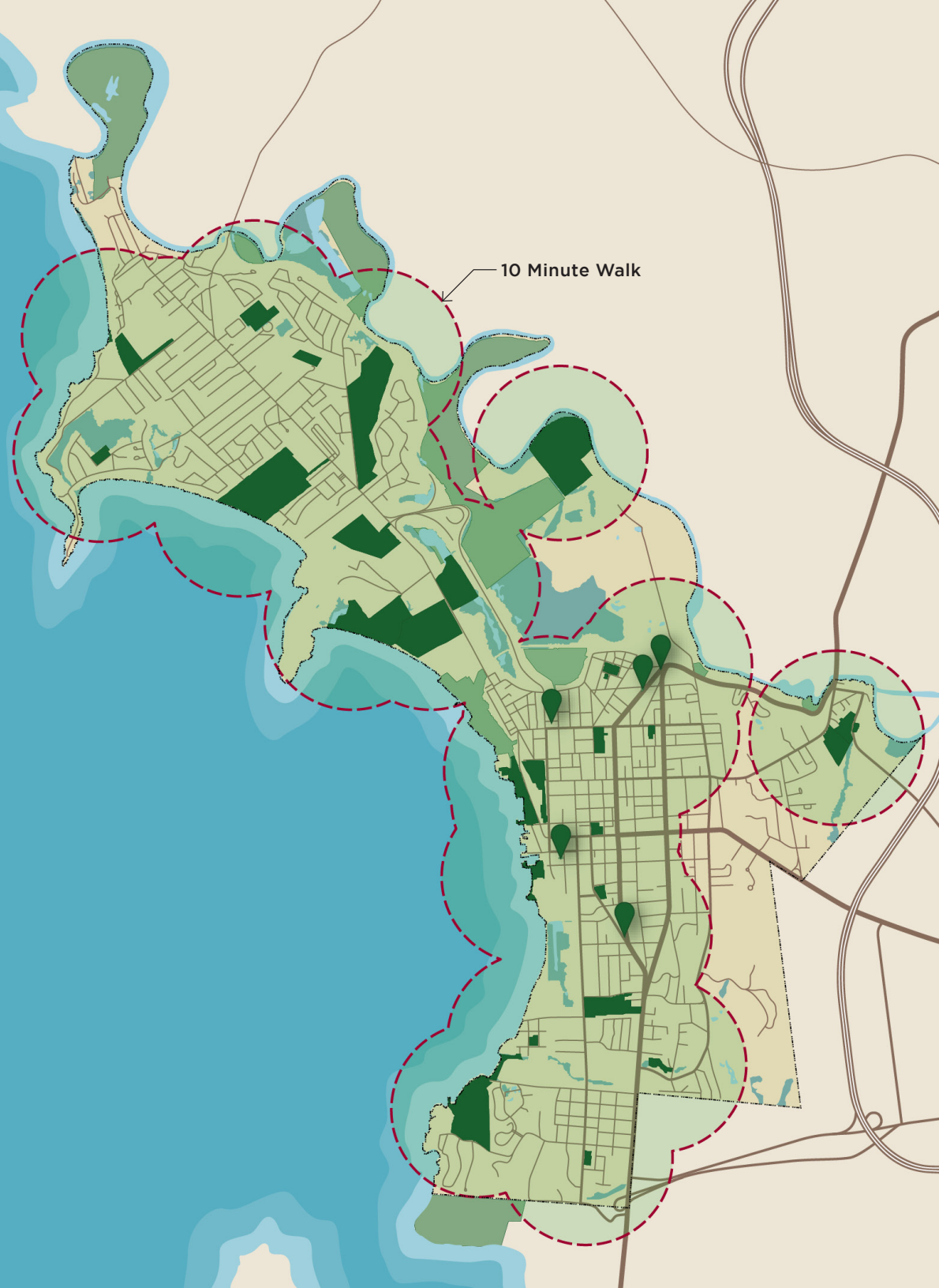


## PARK WALKABILITY

Park access and walkability in Burlington is good, though most of the parks are located along the lakefront. As a result, residents on the east side of town have fewer nearby options. Rather than adding more parks on the east side, the City should focus on strengthening east-west connections.

## LEVEL OF SERVICE

Amenity	# in BTV		
	# Recommended		
Recreation Center	1.33	1.0	-0.3
Fitness Center	0.93	0.0	-0.9
Playground	14.17	17.0	2.8
Outdoor Tennis Court	8.50	18.0	9.5
Outdoor Basketball	5.67	12.5	6.8
Indoor Comp Swimming	0.92	0.0	-0.9
Indoor Non Comp Swimming	0.89	0.0	-0.9
Outdoor Comp Swimming	1.10	0.0	-1.1
Outdoor Non Comp Swimming	1.21	4.0	2.8
Indoor Skating Rink	1.44	1.5	0.1
Outdoor Skating Rink	2.18	5.0	2.8
Open Play Field	2.43	14.0	11.6
Regulation size Soccer/Football/Lacrosse	5.00	4.0	-1.0
Youth size Soccer	3.70	12.0	8.3
90 ft. Baseball Field	1.98	1.0	-1.0
60 ft. Baseball Field	5.67	10.0	4.3
Adult Softball	3.40	2.0	-1.4
Dog Park	1.15	2.0	0.9
Gymnasium	1.52	2.0	0.5
Community Garden	1.55	14.0	12.5



# CASE STUDY: EVOLVING AMENITIES

## EVOLVING AMENITIES

Like Burlington, many communities experience demographic changes. With these changes, a community's needs for amenities and programs change. An effective Parks and Recreation department must understand their evolving constituency and be nimble enough to accommodate their needs.

### WAUKEGAN, IL

In Waukegan Illinois, the percentage of residents identifying as Hispanic or Latino has grown by nearly 10% over 10 years (from 44.8% in 2000 to 53.4% in 2010). With this shift, there has been a growing demand for soccer fields and other field sports. In 2010, the Waukegan Park District department responded by converting an existing golf course into a state of the art soccer and field sport complex called the Waukegan SportsPark. The resulting park won the 2012 National Field of the Year Award.

### CAROL STREAM, IL

In Carol Stream, the past decade saw a 48% increase in residents over 64. In response to their aging constituency, in 2013 the Carol Stream Parks District built a new 90,846-square-foot, multi-generational facility. The facility offers programs geared toward older uses such as aquatic exercises and pickleball.



**Photo (Left):**  
The Waukegan SportsPark in Waukegan, IL.



**Photo (Left):**  
The complex includes 14 soccer fields (13 grass fields and one artificial field) and four 90' baseball fields.



**Right:**  
**Multiuse rooms**  
have flexible  
workoutequipment

**Far right:**  
**The indoor track**  
helps enable year-  
round fitness

**Bottom right:**  
The facility  
includes several  
sustainable design  
features. It is  
expected to be  
rated as a LEED  
silver building.



## THE FOUNTAIN VIEW RECREATION CENTER

This 90,846-square-foot facility is home to Fountain View Fitness. Members have access to the fitness center, an indoor running track, lap swim, fitness classes, aqua fitness classes, open gym, saunas, premium locker rooms and child care. The facility is also home to the Western DuPage Special Recreation Association, which offers programs for individuals with special needs.



# INCLUSIVE SOCIAL SPACES

For the City of Burlington and the Region

*How can Burlington's parks better support the community's need for accessible, functional and diverse social spaces?*

## A PLACE FOR COMMUNITY

The urban park is often seen as a place for residents to step away from city life and reconnect with nature. However, Burlingtonians have a unique relationship to their city parks. Rather than strictly respite from urban life, the parks are also a place to participate in urban life and culture. Among Burlington residents surveyed for this master plan, 64% of respondents requested additional events like concerts, farmers markets, and festivals. In fact, special events lead the list of park needs among respondents. This service should be expanded through careful planning and design.



## THE ROLE OF THE WATERFRONT

Among all of Burlington's parks the waterfront parks stand out as the primary social spaces. The waterfront supports large seasonal events, daily tourism, and a great deal of recreational opportunities for both residents and visitors. Among survey respondents, six of the most visited parks were along the lake. Additionally, 41% of respondents felt the beaches and lake areas should receive the most attention.

## CITY HALL PARK

In order to support additional programming and activity the current and future uses of each park must be understood and vetted with the community. The recent planning for City Hall Park is an excellent example of how a park can be re-envisioned through collaboration and public outreach. A partnership between Burlington City Arts and the Department of Parks and Recreation and Wagner Hodgson Landscape Architecture has generated a vision for the park that foregrounds public art and flexible gathering space. Similar collaborative efforts could help breathe new life into many of the City's underutilized parks.

**Image (Right):**  
Special event and the waterfront consistently scored high among survey respondents in terms of need.

**Photo (Left):**  
The annual Vermont Brewers Festival in Waterfront Park



**#1 SPECIAL EVENTS**  
RANK HIGHEST IN THE LIST OF PARK NEEDS

**61%** OF RESPONDENTS REQUESTED MORE  
**SPECIAL EVENTS**

**6 OF THE 7 MOST VISITED PARKS**  
ARE ON THE **WATERFRONT**

**41%** OF RESIDENTS THINK  
**BEACHES AND LAKE AREAS**  
SHOULD RECEIVE THE **MOST ATTENTION**

**TOP 7 MOST POPULAR FACILITIES**  
**BEACHES** VIEWS & PATHS  
**EVENT SITES** PLAYGROUNDS  
**PICNIC AREAS** **SHELTERS**

**SURVEY FEEDBACK**



# CASE STUDY: WATERFRONT PIAP PROPOSALS

## VISIONS OF PUBLIC SPACE ON THE LAKE

During this process, the master plan team assisted the department in developing proposals for three waterfront projects as part of the City's Public Investment Action Plan (PIAP). While each design was different, as a whole they illustrate the department's vision for a waterfront that includes a diverse range of public spaces.

## WATERFRONT PARK UPGRADES

In addition to being a scenic park for everyday use, Waterfront Park is Burlington's premier event space. The park supports 13 major events each year including the Vermont City Marathon, the Maritime Festival and Discover Jazz. Currently, the infrastructure that supports these events is outdated and a limiting factor in the site's growth potential. The department's proposal called for upgrading these utilities as well as improving the bike path entrances and alignment. The proposals also suggested a reconfiguration of the current boardwalk to create an ADA accessible path to the water's edge.

## MARINA SERVICES EXPANSION

This proposal called for the creation of a public marina at Perkins Pier that would accommodate transient and seasonal boaters. The proposal included waterfront

access for various types of vessels and a landside facility that included a restaurant, department offices, small boat storage, laundry and restrooms. The site was designed to provide a number of other amenities including a new playground, a waterfront path with seating, ornamental planting and a link to the bike path.

## URBAN RESERVE INTERIM

### MANAGEMENT IMPROVEMENTS

This proposal focused on interim solutions to some of the issues limited public access and enjoyment of the Urban Reserve. The core of the proposal was a new waterfront trail weaving through the site with scenic vista points perched over the water. Lining this path were wide swaths of phytoremediation planting to remove contaminants from the soils. As they moved along the path visitors would come upon several public art installations including a relocated piece called "Equinox."

**Image (right):**  
Perspective rendering of the proposed facility at Perkins Pier and the public path along the water.



**Image (Far right):**  
Perspective rendering of the proposed boardwalk renovation at waterfront park



**Image (Bottom)**  
The proposed waterfront trail and scenic vistas at the Urban Reserve



# CONNECTED PARKS + NEIGHBORHOODS

Trails, links, and ecological connections

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## How can existing parks and trails be better connected to help meet neighborhood park needs?

### Biking, Trails, and Walkability

As the park needs assessment demonstrated, Burlington has adequate total park acreage, but not all types or neighborhoods are well served. The majority of the city has access to a park within a 10 minute walk, however there is limited access in wards one and six. Moreover, the city's long, linear shape restricts connectivity between the north and south areas of the city. Both the congestion of downtown and areas of steep topography make connections through downtown difficult. The parks and recreation master plan seeks to better link parks into the existing trail system and build on the existing trails.

The waterfront bike path provides excellent north-south connectivity, connecting into 48 total miles of trails (34 miles of public trails). The path links directly into many of the most well-used parks in the system: Oakledge, Perkins, Pier, Waterfront Park, North Beach, Leddy Park, and the Urban Reserve. Other locations, like Lakeside Park or much of downtown, are located immediately off of the trail. While the bike path is a major asset, additional streetscape improvements and complete streets need to be implemented to augment and



**Photo (Left):** The bike path highlights the wide range of environments along Burlington's lakefront, ranging from woodlands to designed spaces such as Waterfront Park (shown here).

supplement the network, focusing on east-west links (considering topography) as well as north-south bike lanes. These secondary connections will also improve access to the neighborhoods and to the regional trail network.



## BURLINGTON BIKE PATH

The Burlington Bike Path is an important local and regional amenity. In fact, among survey respondents trails rank highest (88%) in necessity, and 86% of respondents support creation of new trails. The bike path links together several of the City's most popular parks including, North Beach, Leddy Park, the Urban Reserve, Waterfront Park, Perkins Pier and Oakledge Park.

**80%** OF RESPONDENTS ARE  
**SATISFIED WITH  
BIKE ACCESSIBILITY  
TO PARKS & FACILITIES.**



# CASE STUDY: BURLINGTON BIKE PATH IMPROVEMENTS

## Bike Path Rehabilitation Project

During this process, the city has been working with Vanasse Hangen Brustlin, Inc. (with GeoDesign, Inc. and SE Group) on a concurrent study to redesign segments of the waterfront bike trail to improve difficult trail links and amenities. The Bike Path Rehabilitation Project proposes the rehabilitation of the approximate 7.5 mile multi-use path that runs through downtown Burlington and along the Lake Champlain waterfront. The Parks and Recreation Master Plan coordinated with this effort, collaborating on a public bike trail ride, “Path to Parks,” in October 2013. Integration with the PIAP process also enabled the plan to study ways to improve waterfront parks and the trails within them to better link to the renewed bike trail.

## Seasonal Trail Use

Given Burlington’s active population, the popularity of the waterfront trail and current investments in improving it, maximizing year-round trail use is a key opportunity. Many other peer cities, such as Bozeman, Montana, pictured here, have adapted their trails to be usable in winter months. The recreation needs assessment demonstrated that there is an existing deficit in indoor recreation space, which is often used to support year round activity in cold climates. Similar to the city’s approach to seasonal ice rinks in several of its parks, additional maintenance and amenities would be required to support this effort.



### Above:

In Bozeman, MT multi-use trails that are beloved for running or biking in the summer are groomed as ski trails during winter months. In Burlington a similar program would help bring users to the lake and between the parks year round. Amenities such as warming huts could help extend winter visitor stays.



**Image (Right)** The bike path links many significant parks. At each park cyclist should have the option to “peel off” and enjoy the park amenities. This image from the Urban reserve PIAP proposal shows a secondary path that would leads riders off the path toward the water’s edge.



## BIKE PATH GATEWAYS

The bike path has great potential to draw visitors off the water and into the City. In many cases the connection from the path the City’s neighborhoods and businesses is through a park. At these moments it is critical to provide clear and welcoming thresholds. These can be simple signage elements or more elaborate gateway structures , as was proposed at Waterfront Park (pictured to the right).



# PROGRAMMING AND OPERATIONS

Maximizing recreation programs, special events, branding and marketing

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*The success of Burlington's recreation programs or special events program relies on marketing and information sharing.*

## RECREATION OPPORTUNITIES

Burlington is an active community with a robust recreation and programming component. The city's diversity and changing demographic trends, both locally and nationally should be considered as changes are made to programming and services in coming years.

The household survey demonstrated the importance and success of Burlington's recreation offerings. The City was rated as the number one provider for parks and recreation programs and facilities, with 68% ranking it first (well above the national average of 48%). Additionally, satisfaction is high with 68% of households expressing satisfaction with the offerings and 89% calling them high quality. Given the high use and satisfaction, it is interesting to note, however, that overall participation, at 23%, lags behind the national average. This may demonstrate a possibility to capture greater participation in city recreation programs.

To increase participation and continue satisfaction, the right programs must be tailored to community requests, prioritizing future program offerings accordingly, such as adult fitness and wellness, nature and winter time outdoor programs. Areas such as adult fitness and

wellness, adult continuing education, special events, outdoor winter recreation, and nature programming are high priorities for the community. Special events are not only community priorities, but they also experienced an increase in revenue in 2011 and 2012; renovations to the Waterfront Park will increase the efficiency and opportunities to stage large, community events. Detailed recommendations for recreation and programming improvements and priorities are found in the technical report.

Finally, the success of Burlington's recreation or special events program relies on a marketing strategy that ensures people know how to use and attend programs. A new brand has been created for the Parks, Recreation, and Waterfront Department through this process. It should be translated to program guides, and to a better online experience (content, design and mobile devices). Additionally, it is recommended that the department create a marketing plan and dedicate staff resources to this effort.



# PARTNERSHIP OPPORTUNITIES



## CITY DEPARTMENTS

BTV SCHOOL DISTRICT  
PUBLIC WORKS  
WATER & WASTEWATER  
CEDO  
CITY ARTS

## BUSINESS

BURTON  
BEN & JERRY'S  
SEVENTH GENERATION  
BRUEGGER'S  
G.S. BLODGETT



## INSTITUTIONS

UNIVERSITY OF VERMONT  
FLETCHER ALLEN HEALTH CARE  
CHAMPLAIN COLLEGE  
ECHO CENTER



## CITIZEN GROUPS

FRIENDS GROUPS  
COMMUNITY GARDENS  
PRIVATE CLUBS  
ATHLETIC CLUBS



## MOBILITY

LOCAL MOTION  
CATAMOUNT TRAIL ASSOC.  
VT BICYCLE &  
PEDESTRIAN COALITION



## CONSERVATION

INTERVALE CENTER  
AUDUBON  
FISH AND WILDLIFE  
WINDOSKI VALLEY  
PARKS DISTRICT



# CASE STUDY: A NEW DEPARTMENT BRAND

## PARKS + RECREATION + WATERFRONT

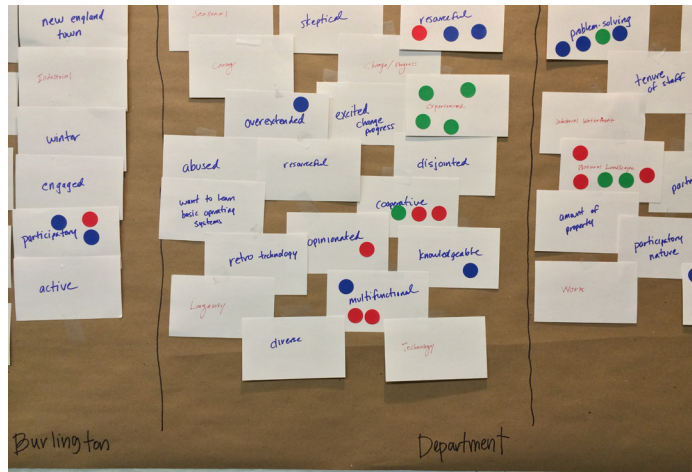
Through the master plan visioning process, the central, overarching goal that arose is the department's wish to function and be perceived of as a cohesive group. The department performs many roles for the city: maintaining and developing parks, trails, and open spaces; programming special events and recreation classes; operating the waterfront marina; and maintaining city-owned buildings. This broad set of responsibilities can result in confusion for the public about the many critical tasks that the department covers. Additionally, the department's logo no longer conveys the fresh energy and contemporary approach that the leadership and staff bring.

A branding study was conducted in coordination with the master plan. Through this, the department was "re-branded" as the Parks, Recreation, and Waterfront Department to encompass all facets of the groups' efforts. A contemporary logo was designed, representing the union and integration of these three divisions, and harkening to the City of Burlington with a shape that also forms a "b." The logo can be re-interpreted to represent individual divisions as well.

The logo is part of a set of branding guidelines that will be deployed by the department as it implements the master plan. It will be used for internal and external communication in business cards, letterhead, apparel, signage, and website re-design.



Photo (Left)  
Branding  
Work Session,  
December 2014



Images (Right)  
The new  
department logo

Photo (Left)  
Branding exercises



BURLINGTON  
**PARKS  
RECREATION  
WATERFRONT**





# SUSTAINABILITY AND STEWARDSHIP

For the City of Burlington and the Region

*Urban parks have the potential to perform many critical functions as the green infrastructure of the city.*

## SUSTAINABLE PARKS

Urban parks offer more than simply a place to play and relax. As cities grow greener, the study and management of urban ecologies are becoming critical to understanding the way natural systems interact with the built city. A parks system can perform powerful functions as a green infrastructure such as providing clean air, combating the urban heat island effect and mitigating the impacts of stormwater runoff. Natural areas also serve as stepping stones for migrating species. Another key service they perform is to create accessible classrooms where residents can learn about their region's ecology without having to leave the city.

## STORMWATER

Burlington is a city defined by its relationship to water. To the West, Lake Champlain has long been a driver of industry and tourism. To the East, the Winooski River and its floodplain is a rich and productive agricultural and ecological corridor. The city occupies a high ridge line between these two hydrological systems - directing runoff toward both. There are a number of ways a park can help improve the water quality in surrounding

landscapes, including infiltration, retention and purification. Additionally, if there is capacity, parks can intake stormwater from surrounding landscapes. This plan builds on a concept proposed in Plan BTV called the "Green Machine," which aims to create a system of interconnected civic spaces that perform critical stormwater management functions.

This plan establishes guidelines for stormwater management in parks. Deploying this strategy will require collaboration between multiple City departments.



**Image (left)**  
The Derway Island wetlands are located at the confluence of the Winooski River and Lake Champlain. Areas like this are ecologically rich.



## BTV HYDROLOGY

The city is flanked by two major water bodies. To the west, Lake Champlain is the scenic backdrop to the city and an important ecological corridor. It also is the one of the most active recreation corridors in the state. Balancing these roles is one of the Park and Recreation's primary tasks.

To the east, the Winooski River, and its wide floodplain has quite a different character. In addition to being incredibly ecologically rich, the fertile banks of the river are cultivated as farmland. Open space in this area is largely under the jurisdiction of the Winooski Valley Park District - a key partner for the City.

Street trees - particularly those designed with adequate soil zones and - perform a valuable role within the city's hydrological cycle. Tree pits can capture and store considerable stormwater that would otherwise flow into storm sewers. This reduces pressure on City infrastructure during storms and helps maintain healthy trees.



# CASE STUDY: THE GREEN MACHINE 2.0

## THE GREEN MACHINE

The Green Machine - a concept developed as part of Plan BTV - is an interconnected system of civic spaces designed to manage stormwater. Parks and plazas play a key role in this concept, serving to infiltrate and in some cases store stormwater. When guided by an overarching strategy this concept can be expanded to all of Burlington's parks.

## THE BIG PICTURE

Stormwater management focuses on two metrics: 1) controlling pollutants entering water bodies and groundwater (quality), and 2) controlling the risk of flooding and erosion caused by rapid flow of stormwater through the watershed (quantity). The management priorities for each park will depend on which water body is downstream of the park. Specifically, parks draining to Lake Champlain will prioritize quality, while parks upstream for the Winooski River will prioritize quality and quantity due to the risk of flooding. This plan establishes management guidelines based on these relationships.

## ON THE GROUND

Once the stormwater management goals for a park are established, the site must be analyzed to understand how to achieve these goals. Soils and topography are the key concerns. Steep slopes accelerate runoff and erosion, while clayey, impervious soils resist infiltration. A careful study of the factors will guide decisions about locating stormwater management measures to maximize runoff retention and infiltration. Additionally, an understanding these conditions can help guide future development in a more effective way than unilateral lot coverage regulations.



**Map (left)**  
**Natural Resource Conservation Service (NRCS) Map of Calahan Park.** These maps can help initiate the study of park soil characteristics that is critical to effective stormwater infiltration.

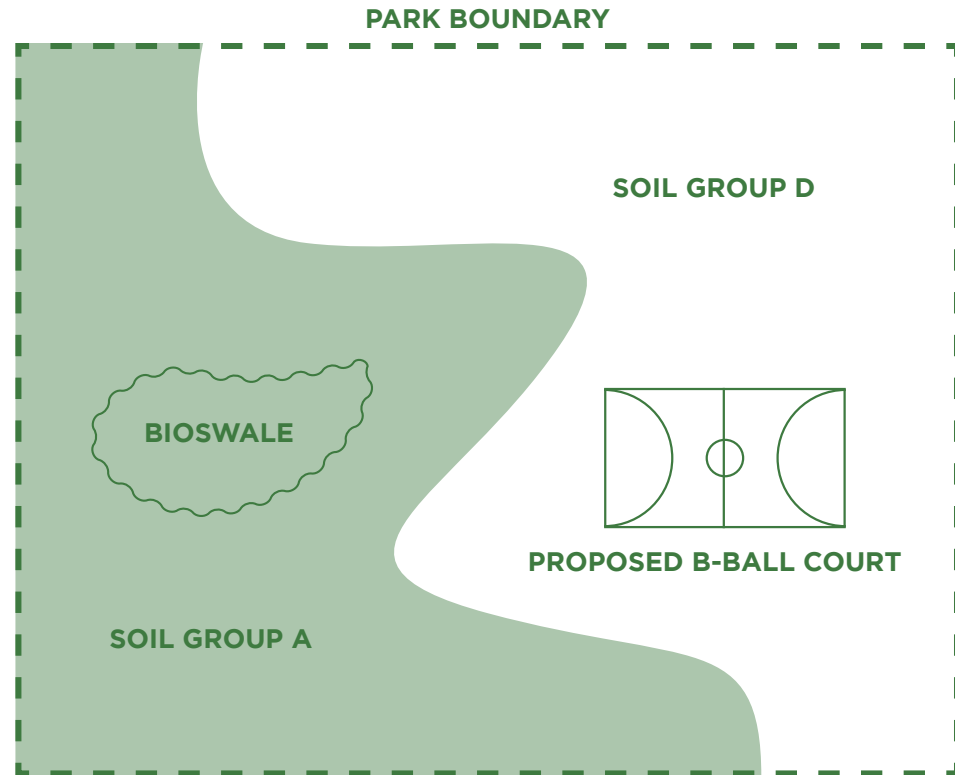
## WHY SOIL MATTERS

Soils should guide the placement and extent of impervious surfaces in order to maximize a park's ability to infiltrate water. Impervious surfaces, such as courts, should be located above impervious soils, as this will not increase the functionally impervious area. Conversely, rain gardens and bioswales should be located above more pervious surfaces to encourage infiltration

### HYDROLOGIC SOIL GROUPS

Group A: Soils having a high infiltration rate (low runoff potential) when thoroughly wet.

Group D: Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.



### Photos (Right)

A detailed understanding of hydrologic soil groups and their performance can help avoid poor amenity location which leads to deterioration. These images show damage to tennis courts caused by inundated soils below. This site is better suited as an infiltration zone.

