

ROBERT MOSES PARKWAY SOUTH SEGMENT

APPENDIX C: PEDESTRIAN AND BICYCLE CONDITIONS



May 2009

I. Existing Conditions

1.1 Overview

The purpose of this report is to document the existing conditions for non-motorized mobility within the Robert Moses Parkway South Segment study area. Existing bicycle and pedestrian accommodations in Niagara Falls State Park along the Parkway corridor were analyzed using digital mapping, field observations, and reviews of related documents. Bicycle and pedestrian use was observed and measured during a holiday weekend in the fall of 2008 to determine the magnitude of activity and to identify opportunities and challenges for non-motorized travel. Linear movement through the Park and connections for pedestrians and bicyclists including trailheads, access points, information kiosks, bike parking and transit linkages were observed and documented.

1.2 Study Area and Existing Conditions

The limits of the study area are from the Parkway interchange with John Daly Boulevard west to State Park Parking Lot #1 and Niagara Street in Niagara Falls, New York. As a premier State Park and international travel destination, the Park experience is centered around viewing the Falls and rapids on the American side of the river. The Parkway corridor provides an opportunity to enhance the Park experience in the study area and to provide a clearly delineated greenway trail for non-motorized travel through the length of the Park. The existing conditions of path materials, connectivity, signage and surfaces do not reflect the range of existing and potential levels of walking, running, bicycling, in-line skating and other trail uses along the river.

The majority of observed non-motorized visitor access to the Park occurs at the west end of the study area, where people arriving from local destinations, parking lots, private vehicles and tour buses walk into and through the Park to the Falls. Pedestrians and bicyclists are able to access the Park via the local street system, but these connections are limited because the existing Parkway creates a barrier between local streets and the Park. Within the Park, the largest crowds of visitors are pedestrians walking along paved paths to the Falls overlook areas. Trolley passengers use the Park shuttle system to reach their destinations, and then become pedestrians on the Park's paths. Viewing areas along the Falls are primarily pedestrian-only zones due to topography and user volumes.

For the purposes of this report, the existing conditions of the study area are presented in the following three sections 1) the interchange of Robert Moses Parkway and John Daly Boulevard at the eastern end of the park, 2) the central section of the park from the existing Goat Island pedestrian bridge to Fourth Street, and 3) the primary park visitor section that includes the Falls viewing area and the Park Visitor Center.

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1.2.1 East End / John B. Daly Boulevard Interchange

The east end of the study area is a relatively quiet, low intensity use area that includes an existing paved path between the Parkway and the river for pedestrians and bicyclists. The path is asphalt, but does not provide separate surfaces for different users, and the width and pavement conditions west of John Daly Boulevard do not meet current AASHTO and NYSDOT guidelines for shared use paths.



View of the existing path along the Niagara River near John Daly Boulevard looking towards the Canadian Falls.

There is limited bicycle/pedestrian access to the Park from adjacent streets in the City of Niagara Falls in this section because most of the potential connections are blocked by the existing travel lanes of the Robert Moses Parkway. There are limited existing non-motorized traffic generators in this area; however there are potential connections to John B. Daly Boulevard and to the proposed Niagara River Greenway along the multi-use path that continues east towards the Grand Island Bridge. The eastern end of the study area provides opportunities for an access point / trailhead for pedestrians and bicyclists to enter the Park. The experience of the Park can 'begin' at this point, allowing people to walk or bike to the rapids and Falls as part of a natural sequence that follows the flow of the river.

1.2.2 Central Section / Between the Goat Island Pedestrian Bridge and 4th Street

The Central Section of the study area also features a paved asphalt path between the existing Parkway and the river. The path is shared by multiple uses including walking, running, in-line skating and bicycling, and user volumes increase as the path moves closer to the Falls. Path conditions are similar to the western section noted above. There are excellent views of the river and rapids in this area.



The existing path in this section does not provide sufficient width for shared use by pedestrians, bicyclists, runners and skaters.

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Parkway to the Goat Island Pedestrian Bridge. The Pedestrian Bridge is shared with Park Trolley transit vehicles, and there are locations where improved separation is needed between bicyclists, pedestrians and transit vehicles in this area. The existing 1st Street Bridge provides pedestrian and motor vehicle access from the City to Goat Island in this section, but there is no direct bike/ped connection from this bridge to the path along the river. There is no existing pedestrian or bike access to the river from 4th Street. There is car parking available on the closed southern section of the Parkway, in this area, which allows access to the eastern side of the park. Access to this parking location can be confusing to locate, limiting its utility for visitors who do not know that it exists. During the fall site visit, this parking area was well utilized and bike racks were observed on many vehicles. The lack of bike/ped connectivity between this section of the Park and the City of Niagara Falls limits the number of Park visitors in this area, and increases the distance people must walk or bike to reach amenities and services outside of the Park. The ratio of bicyclists to pedestrians was observed to be higher in this section than at the Falls viewing areas due to the distance from primary Park access points.

1.2.3 Visitors' Center/Falls Viewing Area

The western segment of the study area includes the Visitor Center, the Rainbow Bridge overlook tower and the primary Falls viewing areas. These are major pedestrian/bike trip generators and destinations that attract the majority of the Park's pedestrian traffic flows. In addition to the primary visitor destinations, this section of the park provides the best existing access to the City of Niagara Falls, including hotels and other attractions located outside of the Park. The State Park Parking Lot #1 is also an important generator of pedestrian traffic and large amounts of ped/bike traffic enters the park from Prospect Street near the Visitor Center. Bicycle riding is currently prohibited on the paths along the Falls in this section of Park due to high pedestrian volumes coupled with no clearly delineated bicycle route. This situation creates a gap in the Park's shared-use path system and the Niagara River Greenway. Although bicyclists are requested to dismount in this zone, there are few bike racks available.



The paths along the primary Falls viewing areas are intended primarily for pedestrians.

1.2.4 Existing Conditions: Observations

The current configuration of the Parkway and State Park in the study area functions as a central hub/destination with pedestrian paths radiating out from the Visitor Center and central Falls viewing area, and as a linear park between the Goat Island Pedestrian Bridge and the Park's east end. While pedestrian access to the Falls viewing areas is the major focus of the Park, there are a number of potential elements which could be addressed to improve the current conditions for pedestrians and bicyclists:

- The creation of a continuous linear trail system can provide Park visitors with a unique experience of the sequence from river to rapids to falls, and is consistent with the vision of the Niagara River Greenway.
- Environmental and historic interpretation can be integrated with improved bike/ped facilities, including additional viewing areas along the rapids and connections to the river at the Park's east end.
- Improved access for pedestrians and bicyclists to and from the Park can be achieved at Fourth Street, Goat Island Bridge, Prospect Street, John Daly Boulevard and other locations to remove the barriers created by the existing Parkway.
- Non-motorized transportation can help reduce vehicular parking demand and congestion within the Park, and provide access to local services for visitors including lodging, restaurants, and bike/trail equipment rentals.
- Increased bike/pedestrian/transit use will complement sustainability and environmental goals for OPRHP, and support efforts to encourage Park visitors to spend more time enjoying outdoor recreation in a unique natural setting.
- Park use can be distributed away from the busiest Falls overlooks by encouraging walking and bicycling along the river and clearly defining the linear greenway trail experience through the Park.
- Wayfinding can be improved as trail users approach the visitor center and central Falls viewing areas due to the high number of path options.
- Separation of pedestrians, bicyclists, in-line skaters, runners and trolley vehicles can be achieved by providing appropriate path surfaces, delineation of uses and/or wider shared-use paths. User conflicts can be reduced in high bike/ped traffic areas to improve the visitor experience.
- Lighting and security can be improved to increase the safety of park visitors.
- Trail /roadway crossings can be made compliant with the MUTCD or grade separated.
- There is a need for micro level ADA improvements to enhance the user experience of people in wheelchairs or parents with strollers.
- Bicycle parking can be provided at dismount zones to support pedestrian priority areas at the Falls overlooks.

The images and map on the following pages illustrate potential pedestrian/bicyclist/trail improvements in the study area based on these observations of existing conditions.

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Field Observation Images



The existing shared-use path between the central Falls viewing area and the Goat Island pedestrian bridge shows 'social' trails created by runners, bicyclists and other trail users.



Trolley passengers are also pedestrians, and conflicts between trail users and the trolley system can be managed to enhance the experience of the Park.



Large crowds gather along the Falls to watch fireworks and the night time light show. Safety, security, pedestrian crowd movement and path lighting are important issues for these events.



The primary Falls overlooks are intended to be pedestrian priority areas due to user volumes, topography and safety issues.



Key

- Primary Trail
- Connection
- Wayside
- Destination / Falls Access
- Trailhead
- Hatch Mott MacDonald
- atlas



Bicycle / Pedestrian / Trail Analysis Map

November 4, 2008

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NEW YORK STATE OFFICE OF PARKS,
RECREATION AND HISTORIC PRESERVATION

1.3 Pedestrian and Bicyclist User Data

Walking and bicycling are consistently rated as among the most popular reasons to visit New York State’s Parks, based on data from the State Comprehensive Outdoor Recreation Plan (SCORP). As one of New York’s premier state parks, it is important to collect field observations and data to support potential improvements. Members of the planning team were present in the Park during the 2008 Columbus Day Weekend to conduct bicycle and pedestrian traffic counts during the late morning and mid-afternoon periods. These counts were conducted at four key locations: the city-side entrance to the Visitor Center, the Pedestrian Bridge to Goat Island, the primary Falls viewing area and the Niagara River overlook on the Eastern side of the park.

The initial survey results provide a perspective of where pedestrian and bicycle traffic is flowing within the park. Not surprisingly, the Falls viewing area and the pedestrian bridge to Goat Island had the highest concentration of pedestrian traffic. It should be noted that the count conducted outside of the visitor center was located on the city-side near the parking lots. The lower pedestrian numbers here compared to the falls viewing area and the pedestrian bridge indicate that many people are entering the park from other locations than those connected with the central parking areas.

Bicycle traffic was largely limited to the eastern side of the park and the pedestrian bridge leading to Goat Island. The lack of bicyclists in the Falls viewing area is consistent with the Park’s policy that bicyclists are not allowed in that area. Strollers and wheelchairs made up nearly 5 percent of the traffic in some areas, indicating support for ADA compliant facilities in the Park. The trolley route only passed by one of the count locations; trolley traffic was counted at the Goat Island Pedestrian Bridge. Based on the data, it appears that the trollies were running approximately every 15 minutes during the Columbus Day Weekend.

2008 COLUMBUS DAY WEEKEND TRAFFIC COUNTS					
Location	Pedestrians	Bicyclists	Runners	Strollers or Wheelchairs	Trolleys
Visitor Center	572	0	0	12	N/A
Falls Viewing Area	656	0	4	18	N/A
Pedestrian Bridge	824	18	2	34	4
River Overlook (east of bridge)	56	8	4	0	N/A

All totals are averaged on an hourly basis based on late morning or early afternoon counts

II. Review of Existing Planning Efforts

The following documents were reviewed as background information for this study. Information from selected pedestrian, bicycle and trail planning efforts in the study area was gathered by the planning team to provide an understanding of the context for the Robert Moses Parkway south segment project. These planning efforts are summarized below.

2.1 Niagara River Greenway Plan

The Niagara River Greenway is a long-term project to create a continuous waterfront trail system (and associated amenities) to connect communities along the river. NYSOPRHP is a partner in this vision, and the RMP project can complement the goals of the Greenway. The Greenway Vision recommends that a bicycle and pedestrian trail system should provide direct access to the Niagara River, running continuously along the entire length of the Niagara Falls waterfront. The Vision promotes the concept of making sure that the path is connected to adjacent neighborhoods and the city street pattern for pedestrian and bicyclist access.

Source:

Niagara River Greenway Plan and Final Environmental Impact Statement
Niagara River Greenway Commission, 2007
<http://www.niagaragreenway.org/FINAL%20REPORT.pdf>

2.2 City of Niagara Falls Strategic Master Plan

The Strategic Master Plan states that the City of Niagara Falls is cut off from the Niagara River by the existing Robert Moses Parkway. The Plan describes the parkway corridor as ‘configured with multiple lanes in each direction and a central dividing median, the Parkway is set within an expressway- width right-of-way and is grossly over scaled in relation to the current and anticipated transportation and capacity needs of the Park. It occupies extremely valuable riverfront lands and represents a significant barrier to safe, easy access to the riverfront corridor.’ The Strategic Master Plan recommends a redesign of the Robert Moses Parkway to create a calm, narrower, more pedestrian friendly and humanly scaled Parkway that accommodates people, cars, and cyclists in a beautiful public realm and streetscape to define an attractive interface between the city and its riverfront.

Source:

Niagara Falls Strategic Master Plan
City of Niagara Falls (2004)
<http://www.nfez.org/planning/programs/strat-plan.htm>

2.3 Achieving Niagara Falls' Future

In April 2002, the Urban Design Project at the University at Buffalo produced the “Achieving Niagara Falls' Future” document. The first strategy listed in the plan is to reconnect Niagara Falls – its downtown and neighborhoods alike – with the Niagara River waterfront. It speaks directly to completing the installation of the waterfront trail system and mitigating the negative impact of the existing Robert Moses Parkway on waterfront access, urban environment, and city image. Recommendation A.1 from this document says:

“Direct access by pedestrians to the Niagara River waterfront is the foundation of this strategy. Therefore, as soon as possible, implement existing plans for a pedestrian and bike way to run continuously along the entire length of the Niagara Falls water front. It is important to make sure that the path is well connected to adjacent neighborhoods and the city street pattern for easy local access.”

Source:

Achieving Niagara Falls's Future: An Assessment of Niagara Falls' Waterfront Planning The Urban Design Project (2002)
<http://128.205.118.147/pub/fallsFuture.htm>

2.4 Bicycle & Pedestrian Master Plan for Erie and Niagara Counties

The 2008 Bicycle and Pedestrian Master Plan is a vision to make bicycling and walking an integral part of daily life in Erie and Niagara Counties. The plan recommends projects, programs and policies for the next ten years to encourage use of these practical, non-polluting and affordable modes of transportation. This plan includes the bike/ped facilities along the Niagara River as an important element of the regional network.

Source:

Bicycle & Pedestrian Master Plan for Erie and Niagara Counties
Greater Buffalo Niagara Regional Transportation Council (2008)
<http://www.gbnrtc.org/planning/bikeped/master-plan/>