



## HHFT Utilization Study – Executive Summary 12/12/2023

The HHFT Visitor Utilization Study prepared by ORCA Consulting (ORCA) is a comprehensive report of all data collected by ORCA between May and October 2023. The primary purpose of the study is to document and analyze the current user condition for all recreational areas immediately adjacent to the proposed Hudson Highlands Fjord Trail (HHFT) project area. The data will be used, in conjunction with forecasting analyses, to predict future usage and visitation levels and to aid in project design and operations and maintenance (O&M) planning. Examples of the data collected and analyzed include:

- Quantification of the current arrival patterns and volumes
- Capturing current pedestrian density in the surrounding communities
- Quantifying transit arrival volumes, including MNR and SeaStreak arrivals, and the impact of surge arrivals on surrounding communities.
- Taking user flow counts and people at one time (PAOT) counts at key areas such as at the trailheads to establish existing average dwell times as well as high and low utilization areas and periods.
- Capturing visitor demographics through a visitor use survey to enable a deeper understanding of local usage patterns compared with those coming from outside the local area.

The user data was collected to support project design and O&M planning in addition to informing future user projections as portions of the project are constructed. The qualitative information in this report will be used to develop a more robust user projection (currently in development). The user projection will inform the environmental review/DGEIS. Examples of how the data will be used as part of the planning process include:

- Support sizing and configuration of the new facilities.
- Planning for appropriate staffing levels and service scheduling, such as for the shuttle system.
- Develop projected impacts of proposed modifications to mitigate areas of high density.
- Develop strategies to minimize the impact of visitors on neighboring communities.
- Identify periods of peak utilization and potential crowding.
- Develop operational and communication strategies to shift user demand away from identified high-utilization areas to lower-utilized areas or periods.
- Provide a basis for forecasting expected parking demand and visitor distribution across the project area.
- Inform communication strategies tailored to these different user segments.

Key findings for existing conditions at the locations along the trails and parks pertinent to the Fjord Trail include the following:

### Pedestrian Level of Service on Main Street sidewalks in Cold Spring

- Per Transportation Research Board standards, Village of Cold Spring sidewalks, except for the west end of upper Main Street, performed at either Level of Service A or B. The west end of upper Main Street reached a Level of Service C. All pedestrian conditions are comfortable and current crowding appears to be due to the high traffic volumes between the MNR station, tunnel, and Fair Street.

### MNR & SeaStreak overlapping schedules.

- Peak MNR passenger arrivals consistently occur between 11 AM and 12 PM.
- SeaStreak arrivals predominately occur from 11 AM to 1 PM.
- Increased pedestrian congestion is in part due to the overlap of MNR and SeaStreak passenger arrivals.

#### Fair Street pedestrian traffic

- Fair Street pedestrian traffic levels are typically low to moderate. Occasionally, large surges of pedestrians occur and is understood to be a source of frustration for Cold Spring residents.

#### Pedestrian tunnel

- The Cold Spring pedestrian tunnel can handle up to 80 pedestrians per minute (both directions combined). The peak tunnel flow can be processed in 15 minutes, providing ample capacity in spite of the high traffic volumes.

#### Restaurant waiting lines

- Wait lines were observed and documented. Although short wait lines are manageable, long wait lines (exceeding 10 or more people), when left unmanaged, create bottlenecks on the sidewalks that impede pedestrian flow.

#### Dockside Park

- Dockside Park consistently experienced low to moderate visitation levels, except on days with favorable weather condition and SeaStreak arrivals. Dwell times were short due to the lack of activity opportunities at the park).
- The most popular activities at Dockside Park were walking/running (44% of total visitors), followed by rest/relaxation (26%), but these varied significantly by area of the park.
- A maximum PAOT count of 120 visitors was documented at Dockside Park – this corresponded to a favorable weather day with a high passenger arrival count from SeaStreak.

#### Washburn Trail area

- The capacity of the Washburn Trail lot is limited and results in vehicles circling community streets looking for a parking spot.
- The majority of Washburn Trail users (78%) arrive from origins to the south.
- Average hiking time on Washburn Tail is estimated at 3.3 hours.

#### Little Stony Point

- Little Stony Point trail utilization varied significantly over the course of the day and between the different study days though the year.
- A maximum count of 180 users per hour was documented on three different days during three different hours. Little Stony Point Overlook utilization was highest in October.
- Beach usage was only documented during the September period, but half of the users were at the beach during that month.

#### Breakneck Ridge Trail area

- On the peak day observed, 2100 hikers were accommodated at Breakneck Ridge Trail, with a maximum hourly count of 350 between 11 AM and 12 PM – 19% less than the maximum count observed at Washburn Trail. The combined hiker count for Breakneck and Wilkinson was higher than that of Washburn Trail.
- Documentation of hiker counts at both Breakneck and Wilkinson trails indicates that the hiker split between these two trails averages 70%/30%. For exiting hikers, the observed split was 50%/50%, indicating that many visitors go up one trail and back down the other.
- The Breakneck MNR Station regularly experienced 100 to 140 passenger arrivals per hour on weekend days (a peak of 230 passengers was experienced on 10/28), and the majority of these were concentrated in the peak 11 AM to 12 PM hour.

### Mt Beacon Trail

- Mt. Beacon hiker counts were lower than those of Breakneck Ridge and Washburn trails – a maximum count of 142 hikers per hour was documented during October.
- An average hiking time of 3.0 hours is estimated for this trail.
- In addition to the vehicles parked at the Mt. Beacon Lot, there were regular occurrences of vehicles parked on the residential streets adjacent to Mt. Beacon. Residents on these affected streets took protective measures to keep their driveways clear.

### Long Dock Park

- Beacon areas, including Long Dock Park, Madam Brett Park, and Dennings Point Trail, experienced primary usage from Dutchess County residents (72% overall).
- The most popular user activity observed was walking/running (39% of total), followed by rest/relaxation (34% of total). These activity types varied significantly by area of the park.
- A maximum PAOT count of 52 was documented in both May and October – considerably less than the 120 observed at Dockside Park – illustrating the impact of surge arrivals at Dockside Park.

Each of the activity areas addressed above had its own unique usage patterns. Generally, peak usage levels were experienced during the month of October, followed by May.

### Implications of Findings for Actions

Suggested action/recommendations and potential outcomes resulting from the Utilization study observations include:

#### Actions by Fjord Trail

- **Communicating parking to drive visitors to desired locations.** Parking space management including vehicle navigation technology can be utilized to direct drivers to available parking areas.
- **Shifting visits to off-peak periods.** Though ORCA's efforts primarily focused on quantifying and observing periods of peak visitation, a comparatively low volume of visitation on weekdays was documented and confirmed. These findings will aid in the development of communications strategies and pricing plans to encourage non-peak visitation. This will ease weekend visitation pressure both within HHFT and in the neighboring communities.

#### Actions by Village

- **Wayfinding:** While collecting data within the Village of Cold Spring, ORCA identified wayfinding opportunities that can improve visitor movement and distribution, easing visitor navigation. The utilization studies have helped to identify key decision-making points for the existing condition and future trail operation enabling the development of recommendations for wayfinding placement and content.
- **Parking:** The role of VCS parking regulations being in place and enforced, such as implementing parking fees with time limits will necessitate the balancing and coordination of parking initiatives for the HHFT parking lots, especially at the Washburn Trail parking lot.