



To: Snyderville Basin Special Recreation District Board Members
From: Dana Jones, District Director
Matt Wagoner, Trails and Open Space Manager

Date: February 11, 2022
Re: Trail Access User Data Report

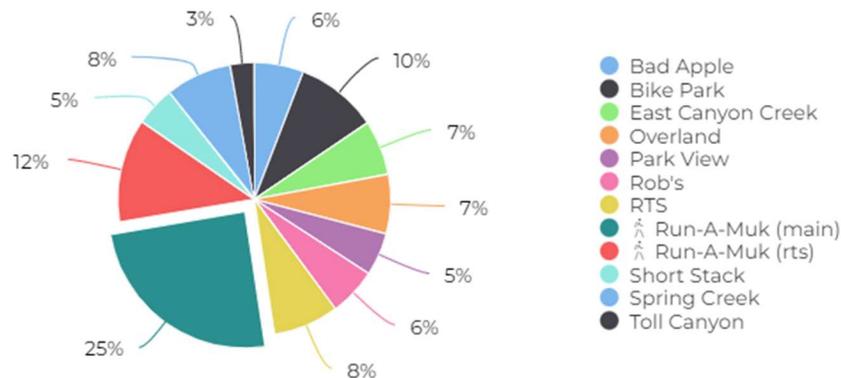
Background: As a continuation of the Access Planning Process that was started in 2020 with the Multi-Disciplinary Group, a study of trail user volume and origin was undertaken by Basin staff. A network of permanent trail counters was installed in 2020 and has now collected more than a full calendar year of trail user data. The other source is Streetlight Data, an online service that uses cell phone locations to count user volume and can also determine the general home location of visitors.

Discussion:

Summary of year-long counter data from January to December 2021

These permanent counters were installed beginning in September of 2020 and the full network became operational in October. The data presented here is for the 2021 calendar year and will provide a baseline for future tracking and study of trail usage patterns. The data has already been used extensively to guide the work of Basin's Trail Ranger Program and direct capital improvement efforts such as the planned expansion of dedicated parking at Run-A-Muk.

- Estimate of user volume – 431,000 annual visits. This is a conservative approximation that is only a sample of backcountry access points.
- Mode split – Cycling accounted for 25% of total trail use volume throughout the year. If you don't count special use areas like the Bike Park and Run-A-Muk, the split for backcountry trails is closer to 35% cyclist and 65% pedestrians.
- Highest volume trailheads – Run-a-Muk is far and away the most frequently used trail access point. The off-leash area accounts for 37% of total user volume or more than 160,000 estimated visits last year. The Trailside Bike Park is a distant second with 10%. Spring Creek (8%), RTS (8%), and Overland (7%) are the next highest in utilization.



- The counters transmit data remotely and allow for nearly real-time monitoring of trail usage at a 15 minute interval. This high resolution data can provide some interesting insights. During the Parley’s Canyon Fire last year, there was a clear drop in trail usage across the system except at Run-a-Muk. Because of its popularity and specialized use, it seems visitors there are not as sensitive to environmental conditions.

Summary of Streetlight Data 2018 to 2021

Streetlight allows for investigation of different research questions with a multiyear database that can track trends over time. Users can define a zone on the map and count the mobile devices that interact with that zone during a defined time period. Some limitations include lack of precise demographic data and only counting “devices” not users. One of the primary goals which came from the Multi-Disciplinary Group and Summit County Council was clarification of where trail users were coming from. Streetlight was identified because its algorithm can determine a device’s home location by analyzing what times of day it spends in specific locations.

Using the historic data for comparison, it appears total annual visitation to the Basin trail system declined in 2020 and has still not returned to pre-pandemic levels. This may seem counter to the media attention given to overcrowding on public lands but the reality was much more complex. One explanation is that 2020 created unpredictable patterns in usage. There may have been fewer users throughout the year, but at times they all seemed to be visiting the same trailhead. People changed their recreation patterns in 2020 and in some cases these traditional off-peak times, where a parking spot could easily be secured in the past, became the period of peak usage. Its possible these changes contributed to reports of more user conflict in the trail system.

User Origin

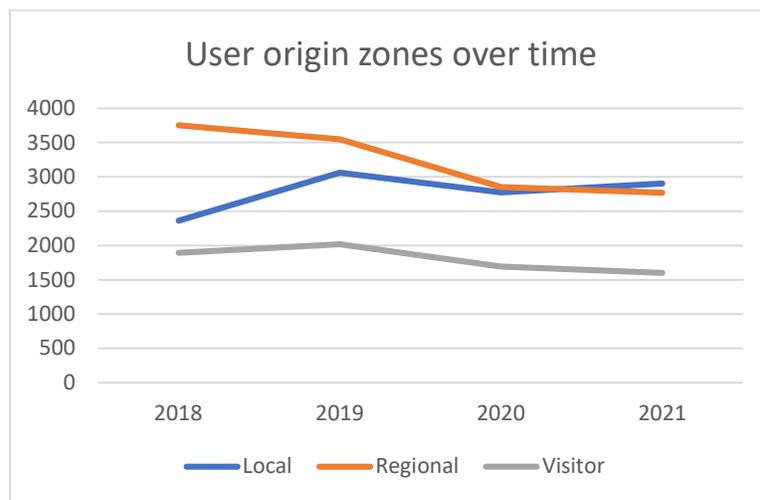
This analysis uses the distance from home location to trailhead to determine trail users' area of origin. Home locations are distributed on a 1km grid and the distances are "as the crow flies", not distance travelled. The most useful characterization was to classify users into three groups:

Locals – home location distance of 0-10 miles. This most closely correlates with the District Boundaries but also includes Park City. In 2021 users living in this area constituted 40% of trail use volume.

Regional users – homes 10-50 miles away. This includes most of the Salt Lake Valley and extends to Evanston, WY. This group accounted for 38% of trail use volume.

Out of area visitors – homes 50+ miles away, but still within the US. This was 22% of user volume in 2021.

This user origin data was also analyzed over time. As a percentage of total use, the data shows a trend of increasing use coming from residents within 10 miles of trailheads. Among that cohort, it is the residents within 1 mile of trailheads that make up an increasingly large percentage of trail use volume.



According to this data, local use trended upward in 2019 followed by a significant decrease in visitation, both regional and out-of-area, during the height of the covid-19 pandemic. This correlates to data that is emerging in outdoor recreation research showing that all outdoor recreationists stayed much closer to home during the pandemic. Urban users, like those in the Wasatch Front Region, were also much more likely to reduce their frequency of outdoor recreation. This data seems to show evidence of these trends which have continued into 2021.