



FARMINGTON VALLEY TRAILS COUNCIL

Trail Utilization Study

Analysis of the Farmington Canal Heritage Trail, Simsbury, Connecticut

Data Period: 11/9/2006 – 11/10/2007

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This study seeks to offer an empirical count of the users of the multi-use trail system which runs from the Red Oak Hill Road in southern Farmington, Connecticut north to the Massachusetts border in Suffield. A central location on the trail was chosen. Based on the data at hand, the Farmington Canal Heritage Trail (FCHT) is heavily used and a major contributor to the economy of the Farmington Valley.

Trail Counters

A remote sensor laser traffic counter was purchased by the FVTC and located on the FCHT approximately .4 miles south of the Weatogue Post Office in Simsbury beginning in September of 2006.

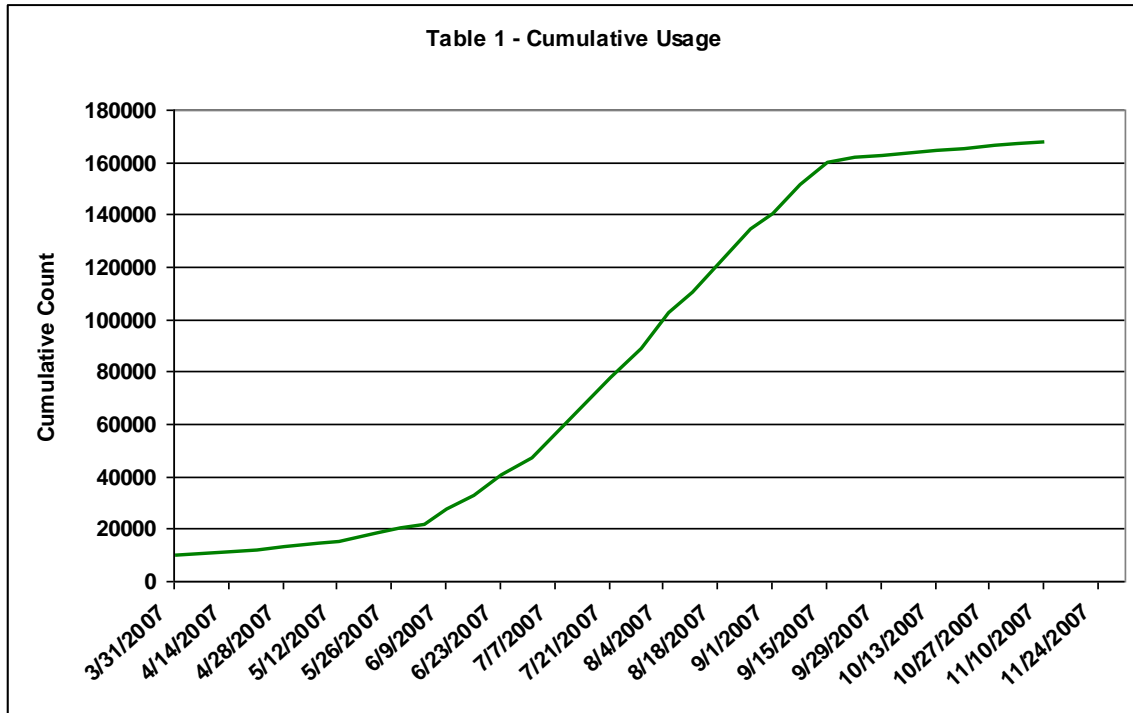
These counters are semi-portable in that they are small and movable, but must be fixed to an immovable object on either side of the trail. They are battery-powered active infrared light beam instruments designed for counting moving objects in the outdoors. In this study, the intent was to count only human trail users as moving objects. The light beam was positioned high enough to not count most animals, with the exception perhaps of deer. It was also placed so that vegetation could not impede the light beam. However it must be noted that this type of counter is still open to a variety of miscounts some of which can be accounted for below, but the results generated from this data should be judged in that light.

The counter operates via a sensor and a reflector. The sensor emits an infrared light beam across the trail, which reflects back to the instrument by the reflector. Whenever the beam of light is broken, the instrument registers a count and produces the total raw number beam breaks on the base unit. An electronic shuttle was plugged into the traffic counters to gain more detailed user information. By using this data hourly counts could be obtained from the traffic counter. This data was unfortunately not available for much of the study although raw counts were continuously downloaded from the receiver unit and recorded on paper and then into a Microsoft Excel database.

Monthly and Daily Use Patterns of the Trail System

The data provided by the trail counters were placed into a Microsoft Excel database, so that they could be analyzed. Data was investigated for total daily use for each month, as well as the median hourly use throughout the course of the study when available.

Table 1 displays the recorded raw aggregate data for the trail for each time period recorded from 11/9/2006 to 11/10/2007.

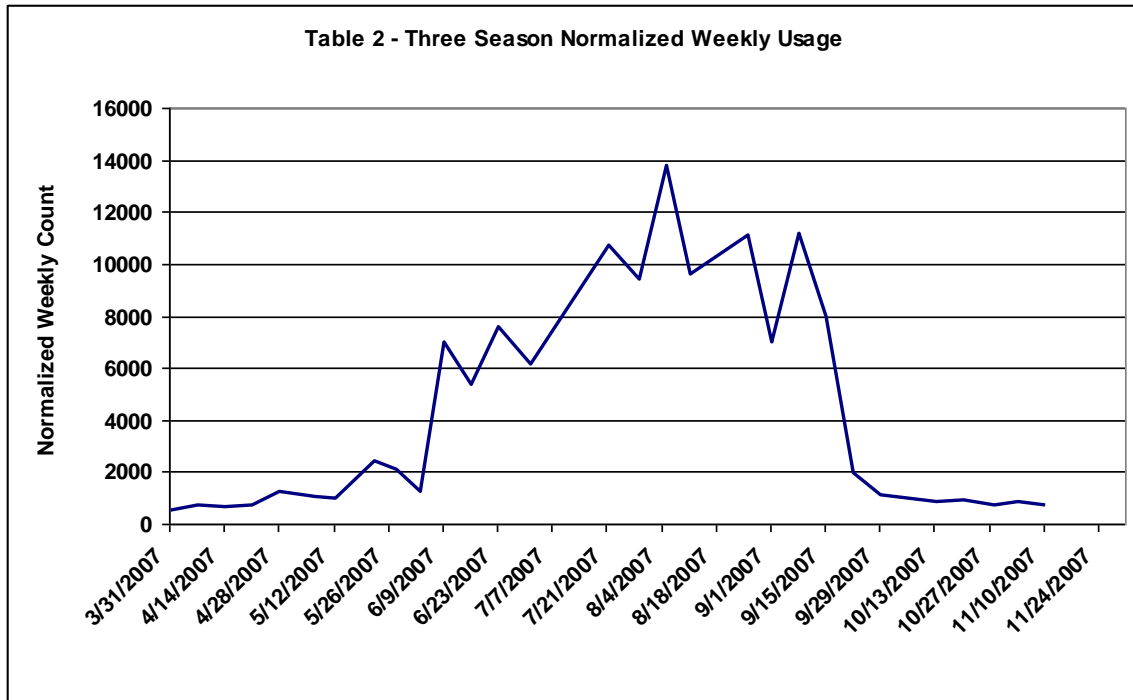


It should also be noted that the counter cannot adequately provide an accurate count of users entering the various trailheads. Because some users both enter and exit at the same trailhead, they may pass the traffic counter and be counted twice. However, some users may enter at one trailhead and then exit at another location. Thus, one cannot assume that the trail counters are simply double that of the actual count of users. Also, if a group of people were to pass by the counters simultaneously, the counter may lump the users as one break in the beam undercounting the total. Other studies have used multiplier data from which an equation was developed to compare the two differing values to provide more accurate results. Therefore, this analysis has adopted that same basic equation, assuming a similar empirical relationship exists in our trail system, for this trail study. The equation is: $(\text{Actual Number} = 0.657 * \text{Traffic Number})$.

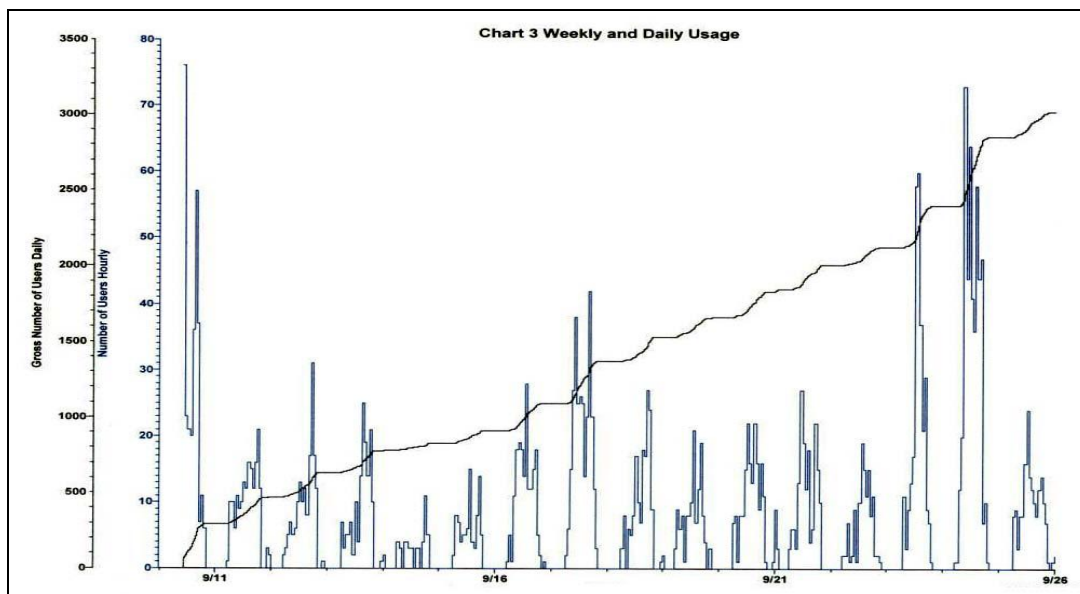
This study has used only counting data from one specific area of the trail system. Any numbers and analysis must therefore be assigned to the approximately 4 miles north and south of the counter to the nearest main trail heads. This encompasses the area of central Simsbury. Therefore this study seriously undercounts total usage for the whole 21 miles of contiguously paved trail that makes up the northern portion of the FCVT. It does not count any perceptible usage of the Farmington River Trail although there is certainly perceptible usage thereof.

Given the gross traffic count of 167,424; estimated trail use would be approximately 110,000 for 2007. Given the prevalence of multiple visits most studies use a multiplier of 6 visits (a blend of multiple studies' data) to find out the actual number of individual trail users. In this case it would be 18,333 discrete individuals.

This study contains data for all four seasons, allowing measurement of seasonality of trail use. Table 2 shows that most visits are from June to September, peaking in August.



The most usage occurs on weekends in peak usage months. Over 800 (525 adjusted) visits were recorded on peak Sundays which were the most heavily travelled days. Table 3 below includes daily and hourly data in a set counted from Sunday 9/10/06 to Tuesday 9/26/06 in which 3,182 visits occurred. Note the “zero” areas for nights.



Economic Impact of Trail Visits

With the annual number of visits being 110,000, certain economic assumptions can be made. It must be assumed that a mix of local and non-local users is involved. Most studies affix a ratio of 90:10 locals to non-locals. There have now been so many studies done on economic impact that to fix an average expenditure per person per day is becoming easier. A blended number of \$38 seems very conservative indeed. This would yield a gross number of \$4,180,000 in spending. Small item purchases such as food, clothing and gasoline made in local communities account for the greater portion of this amount. Lodging over the entire sample is generally thought to be a relatively low figure. A very conservative lodging number would be an addition of \$3 a visit for \$330,000. Bikes and equipment purchases are another part, and many studies place a figure of \$20 a visit to that spending, yielding a conservative \$2,200,000 for a total of \$6,710,000 in spending.

Dollars coming from outside the towns on the trail system are what contributes most to the economic development of these communities. Unfortunately it is very hard to affix a number to that spending. But the University of Pittsburgh's study states: "The fact that persons traveling long distances spent roughly four times as much each trip as local visitors supports the argument that it is visitors from outside the communities that really contribute to economic development."

Conclusions

Comparing and contrasting other studies to the results of the *Trail Utilization Study Analysis of the Farmington Canal Heritage Trail, Simsbury, Connecticut* provided an opportunity to verify the economic impacts on the regional economy. In a full cycle of seasons covering a year, the trail attracted 110,000 visits and generated conservatively four to almost **seven million dollars** in revenues for Simsbury and the Farmington Valley of Connecticut. Additionally, it is a proven fact that home values rise and sales quicken when adjacent to a bike trail.

However, there is much more than just economic value in the trail system that encompasses the FCHT, (which is part of the East Coast Greenway) and the Farmington River Trail. There is the obvious health and recreational benefit. There is a very real boost to the towns involved which are able to provide such an amenity. Local residents are proud of their trail system, not only for themselves, but as an advertising feature for the tourism industry of the area. The Farmington Valley Region is full of history, culture, and scenery. This group of both suburban and more rural communities has always been an attractive tourist attraction for people from all over the country to visit. The multi-use trail system however, is proving to be a huge draw. These linear greenways built on unused railroad corridors now play an important role in connecting communities. They certainly enable users to access the area on foot or bike and explore the scenic and historic landmarks. But perhaps more importantly they allow commutation to and from work, and the ability to undertake short trips in safety for the user and the environment.

The trail system within the Farmington Valley can truly now be called a **proven** resource that enhances the region in many positive ways.

Methodology

This study does not contain important data that future updates may provide. It must be considered an interim document as data in many cases exists only as raw counts for specific periods as the electronic downloading capability of the counting device was out of service for much of the timeframe of this study. Unfortunately hourly data counts were lost for some time periods as were daily counts in some cases. Cumulative data is complete and accurate as described.

A blend of data points have been used to pursue some basic counting and econometric conclusions. A number of studies were reviewed: *The Virginia Creeper Trail: An Assessment of User Demographics, Preferences, and Economics*, produced by the Virginia Department of Conservation in 2004, and The University of Pittsburgh's, *The 2002 User Survey for the Pennsylvania Allegheny Trail Alliance* to name just two. A third can be used as a test case for the base data spending amount. In 1999 the Ohio, Kentucky and Indiana Council of Governments completed a trail study, based on 1997 data called the *Little Miami Scenic Trail; Trail Users Study*. In September 1997, the time the data collection was accomplished, those surveyed mailed back questionnaires. Most all of the respondents were local users. The result was for each use of the trail \$13.54 was spent. Thirty per cent of that expense was auto expenses getting to and from the trail. Accounting for the rise in CPI (Consumer Price Index) that amount equates to \$18.03 in 2007 dollars per visit. Lodging and bike/equipment per person was not included.

Gross data from the trail counter is accurate to the best of our knowledge, but because these aggregate data points and multipliers are being used, without having undertaken a user survey at the data collection point in Simsbury, the findings herein cannot be completely guaranteed accurate and must be used for informational purposes only.

My thanks to the board members and council members who helped with this study.

R. Bruce Donald
President, FVTC
November 29, 2007