

COUNTY OF SAN MATEO
Parks Department



DATE: September 23, 2014

COMMISSION MEETING DATE: October 2, 2014

TO: Parks and Recreation Commission
FROM: Katherine Wright, Park Ranger II
SUBJECT: Improving Visitor Count Methodology

RECOMMENDATION:

Review and accept report.

BACKGROUND:

San Mateo County Parks are growing and visitor use of parks is changing. With added acres and trails, and new technology, it is time for County Parks to update the methodology of assessing visitor use in the parks.

DISCUSSION:

Historically, parks visitor attendance has been estimated using several methodologies. This report summarizes existing methodologies used in County Parks to capture visitor use and presents recommendations of improved methodology using new technology to increase accuracy for our visitor count while maintaining cost effectiveness.

Summary of Current Visitor Count Methodologies

District I

Coyote Point: Staff uses the receipts from car entry fees and multiplies the car count (receipts) by 2.5, which staff there indicates was the recommended formula used by the National Park Service.

Junipero Serra: Staff performs a car count either by a drive through of the park or from receipts at the gatehouse. They multiply the car count by 1.5 to get total user counts. If they have a reservation on that day they use the number of people the reservation has as a part of their count as well.

San Bruno Mountain: A car counter device is used and staff then multiplies the daily car count by 2.5 to get the daily visitor count, using 2.5 as a multiplier to compensate for the people who walk into the park from other entrances.

Crystal Springs Trail: Staff makes an estimate of the number of users by counting how many trail users they see in an hour (when doing restroom cleaning) and multiplying that by the number of hours the Trail is open.

District II

Huddart: Staff divides their count into picnickers and hikers. For picnickers, they do visual estimates of people when they do a drive through of the park. If they have a reservation that day they use the number of people the reservation has as a part of their count as well. For hikers, they perform a car count for cars parked in areas near hiking trails and multiply the car count by 2.

Wunderlich/South County Trails: To obtain these counts, staff estimates based on the number of vehicles, any events, and the weather. Staff expressed interest in having a car counter installed at Wunderlich.

Edgewood: To obtain these counts, staff estimates based on the number of vehicles, any events, and the weather. Staff expressed interest in having a car or trail counter installed at Edgewood.

Flood: Flood Park is not heavily used during the week except for a regular nanny crowd that walks into the park. On the weekends the park is very heavily used and the gatehouse is staffed. For a visitor count they multiply their car count by 2.

Special Events: For Bike Sunday, staff previously did counts for each individual participant using a handheld counter, but now they do estimates.

District III

Memorial: Staff divides their visitor count into many categories: family camping, group camping, youth camping, picnicking, group picnicking, interpretive programs, and trail use. To obtain the counts for family camping they use one of two methods. If it is a busy weekend, they count the sites occupied and multiply by 5. If it is a weekday, they count the number of people registered for each site. For group camping, youth camping and group picnicking, they use the number of people reported when making the reservation and do a rough estimate when collecting the money from the group. For picnicking they use one of two methods. On a weekend they staff the gatehouse all day so they count the car receipts and multiply by 3. On a weekday they do a rough estimate based on the number of vehicles, events, and the weather. For interpretive programs, the staff member leading the interpretive activities keeps a count of how many people attend and reports this to the rangers who do the daily park report. For trails, they include Pescadero Creek Park and San McDonald Park and estimate users based on the number of vehicles (from Iron Ranger receipts), events, and the weather.

Pescadero Creek: Included in trail count for Memorial Park.

Sam McDonald: Included in trail count for Memorial Park. Horse Camp Users are not recorded.

District IV

Fitzgerald Marine Reserve: Staff divides the visitor count into regular visitors and tours. The tour counts are determined by the number of people on the tour reservation. The regular visitor counts are obtained by estimating the number of cars in the parking lot multiplied by 5. They use 5 as a multiplier to compensate for the people who walk into the park from other entrances.

San Pedro: Staff divides their visitor count into the two categories of hiking and picnicking. To obtain these counts they estimate based on the number of vehicles, any events, and the weather.

Pillar Point Bluff/Mirada West and East/ Devil's Slide/ Quarry Park: Staff does not perform any visitor counts for these parks. Devil's Slide Trail Ambassadors provide a count for the visitors they view during their shift. They break this down into the following categories: adults, children, bikers, and dog walkers. A trail counter system for Devil's Slide Trail is urgent because we are often asked for use figures and this information is needed to guide future management of this new trail.

Based on my research, I recommend TRAFx as their program for assessing data looks simple to use, their units are relatively inexpensive, and they are being successfully used by East Bay Regional Parks. We would need a trail counter for either end of the trail. I could gather the park data on a monthly, quarterly, or yearly basis and then generate the reports on the data with the software this company offers. We would only need one license.

Inventory and assessment of practices being used by other Parks Departments

Next is an inventory and assessment of practices being used by other Parks and open space districts to collect visitor use data in urban parks, parks with entrance fees, trail use by mode of transportation (walk, bike, horse), parks with multiple, uncontrolled access (such as Edgewood), car counts and average occupants per car, and how to determine average group sizes and more.

Marin County Parks

They do not keep a visitor count per park generally. For special events they count the number of cars and multiply the car count by 3. In the past they would have an employee sit at a park for eight hours and use a hand counter to record the number of cars or people; they usually used this method for their skateboarding park.

East Bay Regional Parks

They do visitor counts daily and use different methods for each park. They use trail counters in some parks. For parks with gatehouses they count the number of tickets sold and multiply it by a factor that averages the number of users per car. In their open spaces they get estimates from the staff in those parks based usually on what they term guess-timations. In the parks with staffed Visitor Centers, the staff counts the visitors they receive each day. They use TRAFx for their trail counting methods. TRAFx is a trail counter using an infra-red beam that produces a count when it's disrupted by people or vehicles passing through it. Staff indicated these trail counters work well, but require regular battery replacement as data will be lost if the battery dies. With these trail counters, if persons are walking side-by-side in a group the counter only counts them one time as the beam is only disrupted once.

Santa Clara County Parks

No response was received to our inquiry.

San Francisco Parks and Recreation Department

They do not do visitor counts in their parks.

Mid-Peninsula Regional Open Space

No response was received to our inquiry.

Recommendations*

Based on the research, I recommend TRAFx as this program for assessing data looks simple to use, the units are relatively inexpensive, and the program is being successfully used by East Bay Regional Parks. For our parks system, nine Car Counters and 18 Trail Counters would be useful. Using TRAFx and this number of units, the cost of installation would be approximately \$14,500. I could gather the park data on a monthly, quarterly, or yearly basis and then generate the reports on the data with the software this company offers. We would only need one license.

To implement the Car Counters we will need multipliers per axle. We could have volunteers do an annual count to determine these multipliers. For instance, a volunteer in the gatehouse with staff could count the number of cars that come in and how many people were in each car. It would be beneficial if we had a different multiplier for holidays, weekends, and weekdays. For example, if five cars came into Coyote Point on a Saturday with a total of 20 people then the multiplier would be two people per axle for weekends. Some parks currently boost these multipliers up to account for multiple entrance points, but with the Trail Counters in place we will not need to do this anymore.

We would also need to consider places like Edgewood where the entrance is also the exit and therefore the cars will be counted twice. We will need to make sure that the multiplier we come up with is divided by two in that case.

However, some parks will still benefit from counts performed by staff in the field. An example would be Memorial Park. Wurr Flat Group Campground and Huckleberry Flat Group Picnic Area have separate entrances from the Main Entrance and their numbers would not be included in the main car count. It would be beneficial for staff to continue counting and reporting the visitors in these areas. For the camping areas within the main entrance it would also be beneficial to get a count of the people and cars. This way we can distinguish how many people entered the park for day use and how many entered for camping purposes. We will have to have a disclaimer for the estimated number as campers often re-enter the park after day excursions.

Conclusion*

*Conclusion by Director Finley:

“Improvements to Visitor Count Methodology” is a funded project in the 2014-15 budget. Based on Katherine’s research and recommendations, we are prepared to implement her recommendations immediately. This data will be important for future park planning, decision making and performance measurement. Katherine will initially implement, record, analyze and report visitor use data. Once the new processes are established, she will produce protocols for other employees or volunteers to assist in these tasks.