Clerk of the Circuit Court
Board of County Commissioners
Marion County
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Internal Audit Division

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MEMORANDUM

TO: Board of County Commissioners

FROM: David R. Ellspermann, Clerk of the Circuit Court
Wallace K. Watford, Internal Auditor

DATE: July 29, 2005

RE: **REVIEW OF PARKS USAGE AND REVENUE STATISTICS**

The Internal Audit Division has performed a review of usage and revenue statistics concerning public utilization of County parks. This review was requested by the Board of County Commissioners at its meeting of June 21, 2005.

The principal purpose of this review was to determine the accuracy of certain information obtained from the counter systems used by Parks and Recreation Department management. Another purpose was to evaluate the information and determine what such data represents. We used this opportunity to update our findings identified in our previous audit reports 2000-05 and 2001-05 concerning Parks operations.

In the June 21st Agenda Item, Parks stated, as part of Budget Impact, "From our last audit report, there is potential for a 14% increase in revenue if all park users pay the appropriate fee." This pertains to our audit report no. 2000-05, released in August 2000, in which we calculated the minimum violation rate of 14%. We expressly stated that "Although it is certain that the honor system is frequently violated, the costs to enhance the system (such as metered gates and more frequent daily staffing) could be exorbitant and not effective from the viewpoint of cost versus benefit." Our recommendation was made with the intention for Parks to evaluate and implement methods that they determined most appropriate to their operations. Parks management subsequently acquired traffic counters to determine usage at certain parks and to assist in determining a more current "honor system" violation rate, as noted in our follow up audit report no. 2001-05.

Activities Performed

Our review procedures consisted primarily of inquiries of Parks management and operations personnel, review of relevant Parks documentation and on-site observations of Parks operations. We met with responsible Parks staff to discuss Parks revenues and traffic issues. We gained a working knowledge of the benefits and costs of the proposed automated parks access system. We obtained

an understanding of a Park Ranger's supervisory and code enforcement duties. In addition, we discussed and observed cash collection procedures and revenue reporting. We used this opportunity to update our understanding and documentation of cash control and revenue recording which we had obtained during our first audit in 2000.

We reviewed and examined two particular reports that the Parks and Recreation Department submits to the Parks and Recreation Advisory Committee (PRAC). One is entitled "Monthly Traffic Report" which discloses the total traffic account by park for each month, compared to current and three past fiscal years (see Attachment **D**). The second is entitled "Monthly Revenue Report" which discloses the total revenues derived from each park by month, compared to current and five previous fiscal years (see Attachment **E**).

We worked with Parks personnel to better refine these traffic count numbers. Four parks are staffed by seasonal employees on weekends during the summer. We requested that Parks personnel report user activities at each park by recording the number of vehicles by specific categories for comparison to the automated traffic counts on those days and times. We also used this information to determine the relative usage by the different categories of users.

We conducted on-site observations of Parks operations and usage, and performed tests of the traffic counters assigned to "Lake Weir" parks of Carney Island, Hampton Beach and Hope Boat Ramp, as well as Ray Wayside. We chose these parks because they had the same type of traffic counter system in use for the past years, and particularly because the Lake Weir parks were authorized to have the new automated collection/control arm system. We conducted on-site observations of parks usage by paid patrons and pass holders. This included visual inspections of possible "honor system" violators who may not have paid for entrance.

Summary of Findings

Revenues derived from the "honor system" collections and by seasonal attendants are recorded and apportioned to each respective park in which earned. Revenues from annual and semi-annual pass sales are not assigned to any individual park. Pass holders may visit, without any other payment, any park within the Parks system, except KP Hole.

The Parks and Recreation Department "Monthly Traffic Report" submitted to PRAC contains raw and unanalyzed data extracted from the automated counting equipment at each park. Such data is important to show trends and relative usage of individual parks, but needed to be refined before we could include in our analysis. We suggest that reports submitted to PRAC and others, even if prepared for internal management use, contain comments or disclaimers that will assist potential readers to interpret the information presented.

The traffic count numbers generated by the counting equipment include paid vehicles, pass holders, Parks and other official use personnel, vehicle turnarounds, paid vehicles returning on same day and users violating the "honor system" by not paying the entrance fee when the park is not staffed.

We found, based on our observed tests of the traffic counters, that the counters are too often not accurate. For example, one traffic counter may record one vehicle as two, while another counter may record that vehicle correctly. As another example, a particular counter may record a vehicle as one, two or three vehicles, or the vehicle may not be recorded at all.

Each traffic counter is set up to count the same way regardless of where installed, yet we found differences at the four parks reviewed. Further, there are differences in types of vehicles entering the parks. For example, two-axle vehicles (cars and trucks) are the norm at Carney Island and Hampton Beach, while three-and four-axle vehicles (such as trucks with boat trailers) are usual at Hope Boat Ramp and Ray Wayside. The traffic counters cannot identify the differences among the patron vehicles.

Some park traffic "over counts" are expected due to the design of the park. At Hope Boat Ramp, there are eleven public parking spaces (including two for disabled patrons) within the park. Since the park can be heavily used, parking is often required at the field outside of the gate/counter. Therefore, a vehicle is counted when it enters to launch a boat and again when it enters to load the boat.

The traffic counters are periodically rotated among the parks due to battery failure, vandalism and required maintenance. Since some counters are more accurate than others, traffic counts at the parks are not necessarily consistent from period to period.

We compared historical revenue information to historical traffic counts to find a pattern. We encountered difficulties to accomplishing this since the counters have been and still are rotated around the parks. Since some counters appear more accurate than others, it is difficult to make valid and supportable comparisons to past months and especially to past years. Drawing comparisons of any current month to a previous month or previous year is difficult because there are variable uncontrollable factors, chiefly weather conditions. For example, the hurricanes of the 2004 summer season had an impact on attendance and revenues. It was pointed out to us that Carney Island was a designated sand bag pickup point, which could have had an impact on traffic counts during this period.

Specific Findings

The four parks we reviewed have, for the past several years, been staffed by seasonal employees who collect the entrance fees. This occurs during the weekends of the summer months beginning Memorial Day and ending Labor Day.

Revenues at the four parks generally increase when they are staffed by seasonal employees. Greater usage during summer months and the greater probability of fee collection due to seasonal staffing contribute to the increased revenue. We also noted that traffic counts often increased in May, then decreased in June when weekend staffing was used for the entire month.

Parks usage as reported by the "raw" traffic count data is too high due to counting errors by the automated traffic counters. We estimate that the average "over count" rate is 51% at the three Lake Weir parks and at Ray Wayside, as shown in Attachment **A**. This is based on the data obtained when parks were staffed with attendants during period of June 25th through July 24th.

Based upon a limited on-site observation of the four parks, we obtained a current estimate that there is a minimum 16% "honor system" violation rate when parks are not staffed. This is consistent with the 14% minimum violation rate we determined in our report no. 2000-05.

As shown in the Attachment **A**, actual usage of the four parks tested and observed appears to be: Paid Patrons (63%); Patrons returning on same day (5%); Pass Holders (9%); Turnarounds, with no payment (11%); employee and other official use (12%). This is based on information collected during times the parks were staffed with seasonal employees. The Turnarounds could be considered to be among the potential "honor system" violators since the vehicles might have otherwise entered had there been no attendant on duty. Revenues from annual pass sales are not allocated to any individual park.

The estimated potential gross revenue that could have been collected at the three Lake Weir parks for fiscal year ending 9/30/04 is shown in Attachments **B** and **C**. The maximum gross revenue amount is $107,321, while a more moderate estimated gross amount is $90,150. Since FY 2004 had actual gross revenue of $72,111, the maximum method would result in additional revenue of $35,210, while the moderate method would result in $18,039. The maximum is based on the average traffic counter error rate and the relative usage by patrons as determined by data collected during the time the parks were staffed by seasonal employees. The moderate amount includes a further reduction for the minimum honor system violation rate of 16%. We stress that these estimates assume that the "honor system" is replaced by an automated gate system and that all patrons who used the parks would have paid, except for "honor system" violators who are presumed to not use the parks if required to pay.

The total cost to acquire and install the proposed automated collection/control arm system was projected to be $566,124, per the June 21st agenda item (7.D). The agenda item also disclosed related recurring annual operating costs estimated at $7,400. In addition, we believe there could be savings on personnel costs of $9,100 under the assumption that the automated system will replace seasonal employees at the three Lake Weir parks.

Because of certain assumptions that must be made in determining possible additional revenue, it is difficult to assert a precise expected "pay back" period for the cost of the proposed automated collection/control arm system. However, we have calculated such periods for the maximum and moderate methods, as shown in Attachments **B** and **C**, respectively.

Conclusions

Based on the review performed, we have made the following conclusions:

Parks traffic counters provide potentially useful information, but there are many factors which may cause errors in reported counts. The information provided from the counters need much refinement to provide maximum beneficial information to assist in management decisions.

Acquisition of automated collection/control arm system should provide an increase in revenues. We base this conclusion on our analysis which covered the time frame where attendants were on hand for several hours on weekends to collect tickets. Also, an analytical review of past years show a general relationship between months when parks were staffed with seasonal employees, which caused revenues to go up while traffic counts at some parks went down. It is reasonable to expect that a fully automated system would enforce fee collection to at least the same level of compliance.

The proposed automated system would also provide significant improvements in cash collection. The cash would be safeguarded until picked up, and would be contained in a box that could not be opened by the collecting employee. Potential dishonesty of an employee would thus be mitigated since there would be no unauthorized access to cash and financial reports. Cash could further be safeguarded if picked up by a licensed security firm, a possibility suggested by Dr. Niblock.

Also, the revenue reporting by the proposed system would be automatic and could be viewed on-line and downloaded over the internet by staff who have no access to the cash. The reported revenues would be in close relationship to traffic counts since both would be integrated within the system.

We are not sure what would be the more accurate expected "pay back" period for the additional cost of the proposed automated collection/control arm system. Our analysis required many assumptions to project expected revenues. Any change to the assumptions could significantly change the expected revenues.

A significant unknown variable is gate damage from vandalism, which could be expensive and some damage can reasonably be expected to occur. The system has been described as an ATM machine in the forest, so there is also the possibility of expensive system damage arising from illegal attempts to break into the system to get the cash.

We have assumed and accounted for a minimum percentage of "honor system" violators who probably would not pay under any system. However, we have no assurance that all remaining potential patrons included in traffic counts would attend and pay when the new system is installed.

Without the new system, additional revenues should result from increased code enforcement activities by the two authorized Park Rangers (of which only one is presently filled), as well as better adherence to County Parks ordinances and resolutions. Based on our observations, patrons follow the "honor system" more often when a clearly identified County employee is present.

If the proposed automated system were not acquired immediately, a recommended alternative would be more seasonal staffing during non-summer months, perhaps as part of selective enforcement. Such selective enforcement would involve Park Rangers and other regular and seasonal Parks employees routinely concentrating on selected parks, particularly those of specific concern, to identify and warn or ticket "honor system" violators. Parks management could utilize parks usage statistics from ongoing revenue and traffic count analyses obtained while the parks have seasonal attendants.

This review was conducted by Wallace Watford, Internal Auditor, and Sachiko Leon and Kathy Fitzhugh, Staff Auditors. We would like to express our appreciation to Dr. Niblock and his staff, particularly Don Hawkins, for their essential assistance and cooperation during this review.

c: Patrick G. Howard, County Administrator
Lee Niblock, Community Resources Bureau Chief