

Welcome Center Data Collection Process Improvement

Devon M. Harris
South Carolina Department of Parks, Recreation & Tourism
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Problem Statement

Currently, the staffs of the state's nine welcome centers directly assist an average of 1.4 million visitors each year. We track this information because we collect data by requesting visitors to sign a guest register. This register is a simple form asking visitors for their origin, destination, the number in their party, and if it is their first time to South Carolina.¹

The form has 42 lines per sheet with 21 lines per side. The staff of the center tallies each column (or category) per sheet. The sheet totals are entered onto another page that lists 121 potential visitor origins for a daily total and they also enter the total of no's for first timers. Some centers have begun to use the computerized version of this form in order to save time.² This causes a fork in the process map but it rejoins and the end result is the same. All totaled information for one day is entered into an electronic database.

The database only allows one entry for the day, blocking the ability to go directly from the register to the database. Therefore, the middle step is necessary to get a daily tally per origin option (e.g., 15 sheets have 10 NC guests, which tallies to a daily total of 150 NC guests). This step also ensures accuracy and prevents human mathematical errors. Centers will have 5-35 pages per day, depending on the season and center location.

Visitor destinations are further categorized into 17 smaller locations and placed into an Excel Workbook³. The destination data collection was added in Spring 2012 and since that time the SCPRT Technology Services Department has had other project priorities and not enough resources to add this tracking component to our database. It will continue to be tracked in Excel until it is added into the database.

¹ Appendix A- Register Sheet

² Appendix B- Visitor Origin Log

³ Appendix C- Visitor Destinations Log

While completing the process mapping exercise for the existing process, I found it to be an efficient and effective paper based process. However, since it is a paper-based system, it has waste and using the process improvement curriculum, I was able to identify waste in the areas of motion, over processing, overproduction and, occasionally, defects. One improvement some centers can make is to move toward using the computer version of the tally sheet as a few centers have already done. I believe, ultimately, computerizing this step will cut time spent in that specific step of the process once the staff member acclimates to the change. It also alleviates the issue of variation/forking in the process among the centers and additional paper printing costs and storage space.

The end product of the visitor data collection process is valuable because it gives us the profile information about visitors traveling to and through the state. It is one of two metrics we use to gauge the overall traffic through the centers when reporting to the agency and state on the program's usefulness and effectiveness. It's also used in determining marketing efforts for both the agency and its industry partners. However, the agency and tourism partners also have access to other research conducted by national organizations and other data collected by SCPRT, therefore, the Welcome Center's data collection is supplemental and a secondary objective, albeit an important one, for our program.

SCPRT's mission is economic development through sustainable tourism development, marketing and promotion to increase visitation and improve the quality of life for residents of the state. Within that mission, the Welcome Center Program is the front-line marketing team. We exist to increase travel expenditures and expand economic development within the state's tourism industry. We do this by serving as the "front porch" to South Carolina- welcoming them with our award winning customer service, providing them with "inside" information, stories and experiences, and enticing them to make that extra stop, spend more money and stay longer.

An inordinate amount of manpower is spent organizing, counting, verifying and recording the visitor data. This is not the best use of human or financial resources for a secondary mission. If our nationally certified travel counselors are in the back counting sheets of yesterday's travelers, they aren't out front selling for today.

Because the process takes large amounts of time away from our primary purpose of front line sales and service, I began this project looking at the Four M's of Process Improvement: Material, Machines, Men and Methods as presented in the Certified Public Manager training curriculum. If one (or more) of these M's significantly changed, could the process, specifically in terms of the amount of time and resources spent on the process, be significantly improved?

Data Collection and Analysis

First, I established exactly what and how much of our resources go into the process. My primary data collection was the amount of time taken to organize, count, verify and record this information by staff.

On July 1, 2013 all staff members responsible for performing this task began tracking the time spent on this process. A column was added to one of the daily log sheets and when the "data processor" for the day signed off on the task, he/she also logged how long it took from beginning to end in minutes, along with their initials. The timing of July 1 through December 31 allowed for a range of visitation, including multiple seasons, peak weekends and slow traffic weeks. However, it should be noted the centers are open 361 days a year with four closed holidays. Three of the four scheduled annual days fell within this time period, affecting visitation numbers and these results slightly.

I obtained a current salary roster from the Human Resources Department and used the initials to match salaries to the recorded times. At the beginning of January 2014, I entered the data submitted by

the center managers and created a spreadsheet to determine how much money in staff resource/time is spent on visitor data collection and entry.

Appendix D shows a total of 1,982.6 hours were spent on this process in a six month period, rather than on the front line. A full time welcome center employee works 1,950 hours in one year so, projecting a similar pattern for the remainder of the year, this process is more than the equivalence of two FTEs.

When applying this time to the wages of the employees (broken down to an hourly wage) a total of \$26,083.99 of paid salary went into the process for a six month period. This is more than one Travel Coordinator I or II gets in a year. The average time spent per day on the process during the six month period is 9.22 hours (total hours/215 days) and the average hourly rate is \$13.67. Therefore, an estimated 27.7 hours and \$378.10 could be added to the totals to account for the three closed holidays.

In addition to the salary associated with skill and time waste, the paper and ink for printing the register sheets are costly, even when bidding out for the lowest professional printer. Prior to 2012, the individual centers were responsible for printing register sheets at a shop or on site with their inkjet printers as needed.

From 2008 to 2012, the program spent about \$2,100 annually in printing register sheets. An exact figure was difficult to determine because the printing of the sheets is sometimes labeled as "supplies", a frequent entry in the budget tracking system. However, I sifted through documentation from the center managers and the previous Visitor Services Manager and found documentation to accompany the budgets for the past five years. This does not account for those instances where ink and paper were purchased for the centers that regularly printed on-site. When I joined the program in early 2012, I centralized the printing of the register sheets to create a more cost-effective process, with savings around \$2,200 every 24 months.

Once current costs were established, I looked at alternative options for the Machine, the last “M” I needed to address. To do this, I researched how other visitor centers capture their data. I found, essentially, two options- the paper method currently in use and electronic methods.

I researched similar high traffic tourism destinations within South Carolina including Hilton Head, Myrtle Beach, Charleston and Columbia and a few locations in our border states. I also used my access to a national listserv of welcome center program managers to inquire about other state-operated program data collection methods. Of those that responded, I learned of their mechanisms and got feedback about “going electronic”.

The comparable visitor center or museum type locations in South Carolina and our border states do not reach the amount of traffic we see system-wide. However, some are comparable at the center level. Of those, most had multi-purpose mechanisms such as a unit with a screen built into an exhibit. Some locations had stand-alone kiosks that both provides information (travel, exhibit, etc.) and asks questions to get email addresses or social media interest. I received many comments from the locations that said it is primarily children that play with the units. These locations and their tracking methods did not compare to the needs of the Welcome Centers.

From the listserv query I learned that South Carolina is like many states- tracking by paper but looking at taking the leap to electronic. Of the fifteen respondents, nine said they are looking at electronic methods and want to know what others are doing. Two shared their experiences with electronic registers and the companies they used. Four respondents simply stated they use a paper registry. Some of the responses included valid comments about the user of Welcome Centers, their “traditional nature” and the inability of electronic books to “flip through” and see what other visitors have come from the same state. One other response included comments about sanitation and touching a screen that many people have touched. A few of

those exploring electronic methods said they would still keep a paper register on the counter in addition to the new electronic method.

From this research, I determined an electronic method would need to:

1. Capture the data we need and compile it on a daily basis, or weekly at maximum. Ideally, a system would compile a full day of information and calculations on a daily basis.
However, a weekly compilation would be acceptable because we can choose the day we enter the information based on the busyness of center traffic.
2. Allow flexibility and control in what the agency wants to capture. Occasionally we may ask for additional information or change the questions for marketing purposes. We want flexibility with, and control over, the survey questions.
3. Provide easy access to the daily/weekly data OR automatically connect with the agency database to upload the data. The new process is only an improvement if it is faster. Therefore, if it takes a long time to comb through data or to access it, the product may not be more efficient. Potentially, a new system could enter the data automatically into the database system, email the daily totals, or have a location where a staff member can log in to retrieve it within minutes.
4. Be low cost in order to allow purchase of a minimum of three per center for 27 units total. Each center has three paper registers and that is the minimum needed. This is based on traffic flow observed over time and space availability at the counters. If more are added, then the staff does not have adequate mapping space. If any are removed, then a line forms and people will not wait to sign the register resulting in lower counts.
5. Be low maintenance and easy to use on a center/staff level. Adding work to the managers and staff at the centers would not be a process improvement.