

Trail Logs Reveal Visibility Impact On Park Visitors

By Ross J. Loomis and Douglas Garnand

Sometimes comments overheard, written in a guest register or volunteered to a staff member provide important insights into how people feel about a setting they are in. The more spontaneous and unsolicited the comments, the more they are apt to represent unselfconscious, honest opinions. Even visitor logs or comment cards, though a form of request, can sometimes elicit candid reactions. In their book, *In Search of Excellence*, Peters and Waterman report that J. Willard Marriott Sr., of the hotel chain that bears his name, made a point of reading every guest complaint card. Marriott knew the value of good customer service and keeping up with guest comments provided him with a source of information about the reactions of people staying in his hotels.

Comments, whether complaints or compliments, can reveal to management how visitors perceive and feel about specific features in the park. Those features can range from the cleanliness of restrooms to the courtesy and helpfulness of staff who interact with visitors. Comments also can let management and staff know how visitors feel about basic park attributes such as visibility and show how visitor awareness of different conditions of air quality can change the nature of visitor experience in the parks.

The NPS conducts research on air quality through the Air and Water Quality Division, an essential part of whose studies is the monitoring and assessment of the physical change in air quality at different park locations. That work has been augmented by some research on the human aspects of air quality, such as how sensitive the eye-brain system is to different kinds of haze formations that could appear in a vista scene. Other work on the human response to visibility in the parks has involved surveying visitors at vista points in the Grand Canyon and Mesa Verde parks. That work employed interviews and questionnaires that asked visitors such questions as how visibility figured in the context of their enjoyment and satisfaction.

Researchers know that asking survey questions puts a demand on people that may influence how they respond. Comments overheard, entries in visitor guest books, and comments or questions volunteered to staff tend to be free of interviewer or questionnaire demand bias. These alternatives to formal survey procedures are sometimes called "unobtrusive measures," measures that are a more natural part of the setting. Visitors ask questions or make written comments in a visitor log as a natural part of their visit.

Typically, unobtrusive measures are used to validate or check the outcomes of more formal measures, such as interviews. Spontaneous comments will either substantiate what has been found in surveys or point out problems and reactions that, for one reason or another, were not mentioned in the interview or questionnaire assessments. Any lack of consistency between formal and unobtrusive measures can suggest the need for additional work to clarify what is the best measure. In the case of visitor-based visibility research, we had learned from the Grand



Voluntary information about visitor sensitivity to air quality and how visibility affects the visitor experience is often found as commentary in the visitor registration forms.

Canyon survey data that visitor awareness of haze was related to how far they could see as indicated by a measure of Standard Visual Range (SVR). As SVR decreased there was an increased likelihood that visitors would report seeing haze on a vista in answer to interview questions about visibility. Was this relationship just due to the demand quality of the interview? Were we sensitizing people to haze by interviewing them about visibility?

To answer these questions we asked that visibility related information be kept on the ranger report logs for a couple of major hiking trails at the Grand Canyon. Rangers were not to ask visitors about visibility, but were to record the number of times different visitors on the trail made positive or negative comments about visibility. Park staff were helpful in collecting this visibility information as part of routine reporting of trail use and problems. The trail logs were recorded across the days of summer 1983 and the number of visibility related comments tabulated.

The first thing we noticed about the log data was that most days no visibility related comments were recorded during the rangers' trail patrol. That finding was hardly exciting for the visibility researchers! But visibility was quite good during the summer period and so it was not surprising that only infrequent comments were heard.

When the comments were looked at on a day-by-day basis, an interesting pattern appeared. On very clear days, a few positive comments showed up on the logs. Hikers were impressed with being able to see long distances and would comment to a ranger. For the days when SVR was the lowest for the summer, negative comments appeared, and in some cases, 15 to 20 comments were made in a single day. These negative comments often were in the form of questions about why it was hazy or if it was always this hazy. Sometimes hikers were sufficiently impressed by visibility conditions to comment on

what they had noticed the day before. Because visibility impairment can occur in cycles and last a few days, it was not surprising that negative comments usually came in groups across a short time period. What made the trail log data on visibility especially meaningful was that visibility was only one of many, many park attributes hikers could comment on. It helped to validate the survey interview results from other visitors that hikers seemed most likely to comment on visibility when SVR dropped and haze conditions increased.

Park personnel also kept visibility comment logs at two specific locations where it would be expected that people would engage in viewing distant features and might make comments about visual quality. Once again, staff were to record unsolicited comments only, and tally both positive and negative comments. In addition, staff were to record the substance of comments.

One location was the museum at Grand Canyon where visitors could look through the windows to the other rim of the canyon. Results from this log were similar to the trail logs. On many days, there would be no visibility related comments at all; on a few days, some positive comments would be made about the wonder of the view; on yet other days, several negative comments would appear. Visitors would ask why it was hazy, others would assume that it was natural fog or mist, while still others would announce that the haze must be pollution. Some visitors commented that the haze upset their plans to take pictures; others noted that the haze seemed to change the color of canyon features.

The other location used to collect unsolicited comments was the Firetower at Mesa Verde. At this location visitors can see a view out of the park that includes both the landmark shiprock formation and a power plant. Visibility comments, both positive and

negative, were more frequent at this location and were logged on most days. The Mesa Verde Fire-tower log was kept for only 20 days during the 1983 summer. On these 20 days, however, nearly 200 unsolicited comments about visibility were logged by the ranger on duty, with negative comments outnumbering positive by almost three to one. Actual visibility varied considerably across the 20 days and visitor comments changed with different visual quality conditions. More visitors commented about pollution at this location, probably because they could see the power plant and also specific smoke plumes from fires burning in the region. One aspect of visitor comments about visibility that becomes apparent from the Mesa Verde logs is that visitors do try to determine if haze seen is caused by natural or human events.

Visitor comments from all three sources mentioned in this paper revealed concern over loss of opportunity on days of reduced visibility. This pattern in the log data was consistent with survey findings that impaired visibility can reduce visitor enjoyment. These results help us document that visitors do regard visibility as a natural resource. If that resource is diminished, it is realistic to expect visitors to notice the change and become increasingly critical about the loss of visibility. It is difficult for most visitors to know what produces changes in visibility and it is reasonable to expect that on days of impaired visibility visitors will inquire as to why things look the way they do.

The kind of unobtrusive measures described in this paper should not be used by themselves. Coupled with more sophisticated methods such as visitor surveys, they provide a significant source of information about what is happening to the visitor with relation to visibility. The comments help park staff keep in touch with their visitors and researchers to better understand the experience of park visitation.

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