

Comprehensive Evaluation Plan
Selinda Research Associates
November 30, 2006
Version 6

Trail of Time at Grand Canyon National Park

Description of what will be evaluated:

The *Trail of Time (ToT)* exhibition has been divided into four segments, from east to west:

- a. *Into the Future Trail* (200 meters) – from the amphitheatre area east of Yavapai Observation Station to Yavapai Observation Station
- b. *Time Accelerator and Canyon Cutting Trail* (400 meters) from Yavapai Observation Station to Grandeur Point
- c. *Main Trail of Time* (1840 meters) from Grandeur Point to Verkamps
- d. *Early Earth Trail* (2750 meters) from Verkamps to Maricopa Point

The *Main Trail of Time* will be developed first, followed by the *Time Accelerator and Canyon Cutting Trail*. The remaining two segments will be developed after the first two are completed. Evaluation will be conducted on the first two trail segments only, and will focus on the following six components:

- a. meter and ten-meter markings
- b. rock waysides
- c. wayside signs
- d. portals
- e. walking guide
- f. interpretive brochure

Although the evaluations will not focus on the *Into the Future Trail* or the *Early Earth Trail* it is anticipated that findings from the evaluations will also inform the development of these segments as well.

Selinda Research Associates will not conduct evaluations on: the electronic media, the *Trail of Time* website, personal interpretation, the *Trail of Time* book, other publications, marketing materials.

Types of Evaluation and Research Questions

A first phase formative evaluation study was completed in 2004. The remaining evaluation will be comprised of two stages: formative evaluation and summative evaluation.

1. **Formative** – How can we improve prototype versions of various components of the *Main Trail of Time* and the *Time Accelerator and Canyon Cutting Trail* in order to maximize the potential for quality visitor experiences and learning?
2. **Summative** – In what ways and to what extent do the combined *Main Trail of Time* and the *Time Accelerator and Canyon Cutting Trail* achieve their goals and objectives?

Project Teams

The **evaluation** team will consist of Deborah Perry, Eric Gyllenhaal, and Karl Karlstrom, with input from the core team.

Additional project teams with whom the evaluation team will interface include: **planning** team (Karl), **design** team (Andy), **research** team (Steve), and **media** team (Ryan). The project's **core** team is comprised of the leaders of each of these teams, plus additional personnel.

Roles and Responsibilities of Evaluation Team

As project manager **Deborah Perry** will oversee the evaluation project, the development of the evaluation plans, and OMB approvals; manage the timelines and budgets; and ensure the evaluations are of high quality.

As lead researcher, **Eric Gyllenhaal** will guide the evaluation process, including developing the evaluation plans, conducting literature reviews, and collecting and analyzing data. He will also be responsible for the write up and sharing of the evaluation results. Additional SRA researchers may be brought in as appropriate for data collection and analysis.

Karl Karlstrom will serve as client, participating in the development of the evaluation plans and OMB approval, reviewing the findings, and giving appropriate feedback and input in a timely fashion. He will also be responsible for ensuring the construction of selected prototypes for testing, and will serve as a liaison between the evaluation team and Grand Canyon National Park.

Communications & Relationship

The evaluation team will meet twice a month at a mutually agreed upon time. In addition, they will participate in the regularly scheduled core team phone meetings at 3/4/5 p.m. mountain/central/eastern time on Thursdays.

Methodology

As in the first phase formative evaluation, both stages of evaluation will use a naturalistic methodology.

Data Collection Methods

Data collection for the **formative** evaluation will consist of:

- a. literature reviews of relevant research and existing evaluation studies
- b. off-site (in Chicago) testing of draft and prototype components
- c. on-site (at GCNP) testing of draft and prototype components

Data collection for the **summative** evaluation will include:

- a. observations of Park visitors along the two segments of the *Trail of Time* trails
- b. depth interviews with Park visitors along the two segments of the *Trail of Time* trails
- c. follow-up phone interviews with visitors several weeks after their visit to GCNP

Description of Respondents

Most respondents for both the formative and summative studies will be members of small intergenerational social groups or individual adult visitors. While we won't deliberately seek them out, we anticipate that some respondents will be members of tour groups visiting the Park. In addition, the summative evaluation may include students (middle school through college) visiting as part of school field trips, and their teachers.

Data Analysis Methods

As in the first phase formative evaluation, we will use a modified inductive constant comparison data analysis strategy.

Deliverables

One of the first steps for each stage of evaluation will be to develop a detailed evaluation plan which will include the specific research question for that phase, a topical framework which lists all the issues or topics that will be addressed during that stage, a detailed timeline, and a thorough description of research methods and deliverables.

The primary final products from the evaluations will be:

Formative Evaluation: A series of up to 15-20 evaluation briefs.

Summative Evaluation: A final summative evaluation report, including recommendations.

Timeline

Formative Evaluation: December 2006 through September 2008

Summative Evaluation: February 2009 through October 2009

Operating Budget

We anticipate allocating approximately 95 people days to the formative evaluation and approximately 70 people days to the summative. This includes project management, participation in meetings, data collection and analysis, and report writing. It also includes participation in the Advisory meetings.

Logistics

SRA, project team, and National Park Service staff will work together on logistics including:

- Completion of the OMB approval process for each stage.
- Access to GCNP and identification vests/badges
- Posting of signs informing visitors of the evaluation
- Providing a quiet office-like space close to the *Trail* for evaluators to type up debrief notes (with flat surface, chairs, and electrical outlet).
- Housing for evaluators within the Park

Karl will work with National Park Service staff to acquire appropriate tokens of appreciation for respondents when necessary.

Ethical Treatment of Respondents

SRA, the project team, the National Park Service, and NSF are committed to the ethical treatment of respondents. As part of the planning for each stage of the evaluation, we will submit an application for OMB approval of our research. The OMB approval document will detail the ways in which we will adhere to standard professional practices for conducting research in settings of informal learning, and will ensure that the disruption of visitors' experiences is kept to a minimum. For instance, during all periods of data collection, we will post signs informing visitors of the research and giving them a clear option for not participating, and we will obtain verbal informed consent from all visitors who are interviewed as part of the evaluation.

Dissemination of Reports

All reports will be posted on the SRA and *Trail of Time* websites.

Project Closure

Selinda Research Associates is committed to open communication and reflective practice. A project closure meeting will be held at the conclusion of each stage of evaluation.