# Justification for Submission under Federal Lands Transportation Generic Clearance (OMB Control Number 0596-0236)

U.S. Department of Agriculture-Forest Service Office of Regulatory and Management Services	Forest Service Tracking Number: 2016-7-FS

	Date Submitted to							
	Forest Service/USDA:							
1.	IC Title:	White River National Forest – Hanging Lake Surveys						
	Bureau/Office:	LIODA Farrat Carrier						
2.		USDA Forest Service	<del></del>					
3.	Abstract: (not	to exceed 150 words)						
	visitor behavior Forest's Hangir experiencing in the parking lot a information coll Transportation potential future  The survey sen 1) Understand a 2) Evaluate visi	se of this ICR is to assist the U.S. Forest Service staff in better understanding avior, experiences, and desires regarding future use of the White River National anging Lake Trail near Glenwood Springs, Colorado. This trail has been no increased visitation causing safety issues on nearby Interstate 70, crowding in lot and on the trail, and resource degradation issues throughout the site. The notice collected will inform the U.S. Forest Service (FS) and U.S. Department of tion (DOT) Volpe Center's transportation management study that is looking at a liture fee and shuttle system opportunities.  It is serves three purposes:  It is an an an advantagement of transportation solutions that address and visitor safety and crowding issues currently experienced at Hanging Lake.						
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6.	Lead Agency IC Clearance Officer Reviewing the IC:							
	First Nam	ie:	Kerri P.					
	Last Nam	e:	Mills					
	Title:		Acting Information Collections Officer					
	Phone:		(202) 205-9967					
	Email:		kpmills@fs.fe	ed.us				
7.	Description Population Responder	n/Potential and older) who visit the White River National Forest's Hanging Lake		's Hanging Lake				
8.	8. IC Dates		6/1/2016 To 10/01/2016		.0/01/2016			
9.	9. Type of Information Collection Instrument (Check ALL that Apply)							
X Int	tercept	Telephone	Mail	Web-b	ased	Focus (	Groups	Comment
	Other							

### **10. Instrument Development:**

(Who assisted in content development? Statistics? Was the instrument pretested? How were improvements integrated?)

The instrument was developed by staff at the Volpe Center and U.S. Forest Service:

- Lauren Deaderick, Community Planner, U.S. DOT Volpe Center
- Margaret Petrella, Social Scientist, U.S. DOT Volpe Center
- Benjamin Rasmussen, Community Planner, U.S. DOT Volpe Center
- Kay Hopkins, Outdoor Recreation Planner, U.S. Forest Service
- Paula Peterson, District Recreation Staff, U.S. Forest Service

The survey was developed using the Compendium of Question from the Collaborative Visitor Transportation Survey Generic Clearance and pre-tested by FS employees.

# **11.** Which of the five areas from the Compendium of Questions will be addressed in your IC? (Check all that apply).

- X Topic Area #1: Respondent characteristics
- X Topic Area #2: Traveler Information
- X Topic Area #3: Trip behaviors
- X Topic Area #4: Assessment of Visitor Experiences and Transportation-Related Facilities, Conditions, and Services
- X Topic Area #5: Economic Impact and Visitor Spending/Costs

In addition, for each question in your survey instrument (or discussion guide, comment card, etc.), please indicate the Compendium Topic Area and the unique question identifier from the Compendium. If the question is not taken from the Compendium, indicate "NEW".

#### **VISITOR SURVEY**

Survey Question Number	Compendium Topic Area	Compendium Question Identifier				
The question wording was adjusted, as necessary, to refer to Hanging Lake (the survey site). Likewise,						
response categories w	ere adjusted to be site-specific, as needed.					
1	#3 – Trip Behaviors	TPURP3				
2	#3 – Trip Behaviors	TDUR4/TDEST1				
3	#3 – Trip Behaviors	TDEST1				
4	#3 – Trip Behaviors	TRANCOND8				
5	#3 – Trip Behaviors	TPURP8				
6	#1 – Respondent characteristics	AGE11				
7	#1 – Respondent characteristics	GEN1				
8	#1 – Respondent characteristics	ETHNIC1				
9	#1 – Respondent characteristics	RACE1				
10	#1 – Respondent characteristics	INC1				
11	#1 – Respondent characteristics	RES1				

# **11.** Which of the five areas from the Compendium of Questions will be addressed in your IC? (Check all that apply). (CONTINUED)

- X Topic Area #1: Respondent characteristics
- X Topic Area #2: Traveler Information
- X Topic Area #3: Trip behaviors
- X Topic Area #4: Assessment of Visitor Experiences and Transportation-Related Facilities, Conditions, and Services
- X Topic Area #5: Economic Impact and Visitor Spending/Costs

In addition, for each question in your survey instrument (or discussion guide, comment card, etc.), please indicate the Compendium Topic Area and the unique question identifier from the Compendium. If the question is not taken from the Compendium, indicate "NEW".

#### **HIKER SURVEY**

Survey Question	Compendium Topic Area	Compendium Question			
Number		Identifier			
The question wording was adjusted, as necessary, to refer to Hanging Lake (the survey site). Likewise, response categories were adjusted to be site-specific, as needed.					
1	#3 – Trip Behaviors	TPURP3			
2	#3 – Trip Behaviors	TDUR4/TDEST1			
3	#3 – Trip Behaviors	TDEST1			
4	#3 – Trip Behaviors	TRANCOND8			
	#3 – Trip Behaviors	TPURP8			
5	#3 – Trip Behaviors	VHIS1			
6					
7	#1 – Respondent Characteristics	TPLAN1			
8	Not in Compendium	NEW			
9	#2 – Traveler Information	TINFO8			
10	#1 – Respondent Characteristics	KNOW10			
11	#1 – Respondent Characteristics	KNOW10			
12	#3 – Trip Behaviors	TRANCOND12			
13	#4 – Assessment of Visitor Experience	EVAL33			
14	#4 – Assessment of Visitor Experience	EVAL34			
15	#4 – Assessment of Visitor Experience	RESPRO3			
16	#4 – Assessment of Visitor Experience	SAFE6			
17	#3 – Trip Behaviors	FUT1			
18	#4 – Assessment of Visitor Experience	OPIN11			
19	#4 – Assessment of Visitor Experience	SHPREF3			
20	#5 – Economic Impact and Visitor Spending	ECON8			
21	#4 – Assessment of Visitor Experience & #5 – Economic Impact and Visitor Spending	SHPREF6/ECON8			
22	#4 – Assessment of Visitor Experience	SHPREF23			
23	#5 – Economic Impact and Visitor Spending	ECON2			
24	#1 – Respondent Characteristics	AGE11			
25	#1 – Respondent Characteristics	GEN1			
26	#1 – Respondent Characteristics	ETHNIC1			
27	#1 – Respondent Characteristics	RACE1			
28	#1 – Respondent Characteristics	INC1			
29	#1 – Respondent Characteristics	RES1			

#### 12. Methodology:

(Use as much space as needed; if necessary include additional explanation on separate page).

### **Respondent Universe**

The respondent universe includes adult visitors, 16 and over, to Hanging Lake. While we anticipate that most visitors will be hiking the Hanging Lake trail, other users, such as those traveling through the area or using the rest area facilities, will also be intercepted so that we can estimate different visitor types in the population.

If users did not hike the Hanging Lake trail, they will answer only General Trip and Demographic questions.

If users hiked the Hanging Lake trail, they will answer General Trip, Visitor Knowledge and Experience, Future Use, and Demographic questions.

### **Sampling Plan/Procedure**

To capture the several visitor types of Hanging Lake trail and users of the Hanging Lake parking lot, surveyors will be intercepting visitors at one location on-site, in front of the restroom facilities along the Glenwood Recreation Path. This location is close to the Hanging Lake parking lot and the trailhead.

A random sample of weekday and weekend visitors will be taken during a summer week. The summer months are the peak season for Hanging Lake and the FS is interested in learning about those peak season visitors as most of its management techniques will be designed to better manage the site during peak months.

Based on visitor count data, total weekday visitation: Monday through Friday; is roughly equivalent to weekend visitation: Saturday and Sunday. As a result the sample will be divided evenly between weekdays and weekends, with approximately 200 surveys collected on weekdays and another 200 surveys collected over the course of a weekend. Based on visitor count data, it is estimated it will take 3 weekdays to complete 200 surveys of weekday visitors and 2 weekend days to complete 200 surveys. This total of 400 completed surveys will result in a margin of error of +/- 5% with a 95% confidence level (Dillman, Smyth, & Melani Christian, 2014).

To ensure that all times of day are represented, the survey day will be from 8:00 AM to 7:00 PM. During the sample day on weekdays, one individual (the one with the closest upcoming birthday) will be asked to participate in the survey. During sample day on weekends, every other group will be intercepted and asked to participate due to the high amount of weekend visitation.

#### **Instrument Administration**

A team of three to four surveyors will be onsite to intercept visitors and to administer the paper-based survey. The next birthday method will be used to randomly select the person who will complete the survey within a group. The survey administration will be read the following introduction script:

"Hello, my name is [first and last name]. We are conducting a transportation study for the U.S. Forest Service to better understand visitor's experience at Hanging Lake. Would you like to participate in our brief survey? Participation is voluntary and all responses are anonymous."

If **YES**: "Thank you!"

If there is more than one person in the group: screener will ask: "First, can I ask who in the group has celebrated their birthday most recently?"

**ASK IDENTIFIED PERSON**: "Did you hike Hanging Lake today?"

- If YES: "Thank you, this survey should take about 10-15 minutes" and screener will hand clipboard with the "HIKER" survey.
- IF **NO but plan to**: "Thank you! Maybe we will survey you after your hike.
- IF NO: "Thank you, this survey should take about 5 minutes" and screener will hand clipboard with the "VISITOR" survey.

IF **NO**: "Thank you for your time! Could you answer just a couple of brief questions?"

- If **YES**, we ask the following non-response questions:
  - 1. "Have you visited Hanging Lake previously? If **YES**, will ask the following questions:
    - a. "Approximate number of times?
    - b. "What is your purpose for visiting Hanging Lake?"
- IF NO: "Ok, enjoy your day!"

# **Expected Response Rate and Confidence Levels**

The project team projects at least a 63 percent response rate based on other recreational on-site surveys administered by the FS in Colorado. The Arapahoe-Roosevelt National Forest, located just under 5 hours away from Hanging Lake, received an average response rate of 63 percent when conducting a similar visitor survey at its various sites a few years ago.

# Strategies for dealing with potential non-response bias

The surveyors will keep a Non-Response Log. For each refusal, they will record the following observed characteristics:

- time approached,
- group size, including number of young children, and
- activity participating in (if evident).

In addition to these observations, surveyors will attempt to ask two questions:

- 1. Have you visited Hanging Lake previously? If yes, how many times?; and
- 2. What is the purpose of your visit to Hanging Lake?

In recording these characteristics, the project team will better understand if there are differences on these measures between those who responded to the survey and those who refused to participate (non-respondents). If necessary, the survey team will develop and apply weights to the data based on this information.

## Description of any pre-testing and peer review of the methods and/or instrument (recommended)

This survey was peer reviewed by both staff at the FS and the Volpe Center.

Due to time and weather constraints at the site, the project team conducted a pre-test internally with nine FS employees who have all visited Hanging Lake. Two surveys were administered with a surveyor asking questions and found that elongated burden time, therefore the survey will be self-conducted by the visitor with staff available to answer questions. Average pre-test time for self-conducted was eight and a half minutes, this was used to inform the estimated burden hours.

Additionally the following updates were made to the table based on the pre-tests:

- Q5: changed and added language to ensure visitors will be able to read the Part A and B to the question if they rode a bicycle; during the pre-test several respondents missed Part B.
- Q10: rearranged the columns as respondents found it confusing to have Column A first and the list of options in the middle.

13.	Total Number of Initial Contacts and Expected Number of Respondents	Initial Contacts: 640 Expected Respondents: 400
14.	Estimated Time to Complete Initial Contact and Time to Complete Instrument	Initial contact: 1 minute VISITOR SURVEY Instrument completion: 5 minutes HIKER SURVEY Instrument completion: 15 minutes
15.	Total Burden Hours Initial Contacts: 640 Respondents – Visitor Survey: 40 Respondents – Hiker Survey: 360Total	10.67 hours 3.33 hours 90.00 hours

## 16. Reporting Plan:

The data collected will be analyzed and presented in a detailed report format as well as in a PowerPoint presentation format to be completed by the Volpe Center. The data is important to the U.S. Forest Service's management plan for the area and therefore, presentations will be given internally to the Forest and District Supervisors, planners, resource managers, and engineers. Additionally, the information will be shared with the following stakeholders: Colorado Department of Transportation, Excel Energy, Glenwood Springs City Council, Garfield County Board of Commissioners, Glenwood Springs Chamber of Commerce, Glenwood Springs Tourism Promotion Board, Colorado State Patrol, Garfield County Sheriff's Department, and Glenwood Springs Fire Department.

The report will be published on the National Transportation Library's website and made public on the Volpe Center website as well as the White River National Forest website.

### 17. Justification, Purpose, and Use:

#### **IC Justification and Purpose**

The purpose of this IC is to fill gaps in information about visitor experience and future use expectations of visitors to Hanging Lake. The White River National Forest staff are developing an adaptive management plan that seeks to protect and preserve the unique and fragile natural resources within the Hanging Lake area. With growing visitor use, visitor safety is declining and natural resources are being degraded, resulting in negative impacts to the visitor experience. The parking lot is over-capacity. with U.S. Forest Service rangers having to take time to manage the parking lot. The traffic in the parking lot during summer months can spill over and cause congestion along I-70 and other safety rest areas in Glenwood Canyon. The parking lot and trail crowding has caused public safety issues in the past with emergency responders often slowed down by not being able to access the trail due to illegally parked vehicles and the number of people on the trail.

In collecting data from visitors, the U.S. Forest Service staff will be better equipped to develop feasible transportation management solutions to sustain a high quality visitor experience as well as protect the environment and continue to economically benefit the surrounding communities.

IC Goals	The Volpe Center is conducting an Alternative Transportation Study at Hanging Lake, and the study identified the following broad goals:  1. Protect the natural resource 2. Improve management of congestion at Hanging Lake by better understanding the visitor experience at Hanging Lake parking lot and trail 3. Improve visitor experience by better understanding how growth in visitation over the last five years is affecting the visitor experience 4. Enhance public safety by asking visitors about safety experiences 5. Support local tourism by gathering information on visitor expenses in the area and opinions about future management techniques 6. Improve traveler information by collecting information about visitor decision making and traveler information outlets  This IC includes the collection of visitor experience data that will be used in support of these goals. Moreover, this data cannot be obtained through means other than visitor surveys.  Note: A summary of the draft Alternative Transportation Study at Hanging Lake can be accessed here:  https://www.volpe.dot.gov/transportation-planning/public-lands/white-river-national-forest-hanging-lake-recreation-site  The Alternative Transportation Study will be finalized with the inclusion of transportation solutions that address the problems at Hanging Lake. The development of these solutions rely in large part on the visitor data collected in this IC.
Utility to Managers	The results of this study will be used to not only inform the recommendations made in the Volpe Center's transportation study, but also will assist in determining the adaptive management strategies selected by U.S. Forest Service White River National Forest staff.

# How will the results of the IC be analyzed and used?

The data collected on the paper-based survey will be coded and input into an Excel spreadsheet. After input, quality assurance and quality control (QA/QC) will be performed to ensure that data were coded properly and accurately. That data will then be imported in either SPSS or STATA. The data also will be uploaded into the Collaborative Visitor Transportation Survey sciencebase.gov account. All data will be stored in electronic and hard copy and will adhere to data management procedures by the Federal Government (since no personally identifiable information (PII) is being collected, there are no concerns about the sharing of PII).

The data will be analyzed for any biases. In addition to overall frequencies, subgroup analysis will be performed looking at key variables, including time of day (peak versus non-peak), weekday versus weekend, group size, previous visitation, and other identifiers that are of interest. Additionally, visitor counter data collected through the software TRAFx at the trailhead will be paired with the sample days to understand the visitation on those days.

How will the data be tabulated? What Statistical Techniques will be used to generalize the results to the entire customer population? How will limitations on use of data be handled? If the survey results in a lower than anticipated response rate, how will you address this when reporting the results? (Use as much space as needed; if necessary include additional explanation on separate page).

The data will be tabulated in Excel and imported in either SPSS or STATA, as described above. Results will be reported separately for the hiker sample and the visitor sample. For categorical data (e.g., a question asking respondents which types of transportation they used to reach the site), data will be analyzed as the percentage of respondents selecting each response. A question that asked respondents to rate their satisfaction on a 5-point scale can utilize parametric statistics such as means. Frequencies or means will be reported for all questions in the survey.

For subgroup analysis (e.g., weekday vs. weekend; peak vs. non-peak; previously visited vs. not) appropriate statistical tests will be applied (the chi-square, t-test, or analysis of variance). With 400 completed surveys, findings will be reported with 95 percent confidence. Statistical significance and confidence intervals will be reported.

Any limitations on use of the data will be noted in the data codebook and in the survey report.

If the response rate is lower than expected, we will use the non-response analysis to determine if weighting is needed. If that analysis reveals that there are no significant differences between respondents and non-respondents, then weighting will not be necessary. Appropriate confidence intervals will be reported, based on sample sizes.

Is this survey intended to measure a Government Performance and Results Act (GPRA) performance measure? If so, please include an excerpt from the appropriate document. (Use as much space as needed; if necessary include additional explanation on separate page). No.