

Proposal for Expanding the Human Element of the Environmental Dashboard Central Wasatch Commission

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The DIGIT Lab at the University of Utah proposes to support the expansion of the Human Element of the Environmental Dashboard in two phases. The first phase consisting of identifying and outlining the Human Element's framework and indicators. This will also include identifying and prioritizing data collection needs required to build out the Human Element (Phase 2). It is well understood that the availability of existing data to support the Human Element is extremely limited and that data collection will be an integral component in the implementation of Phase 1 which will occur in Phase 2. Phase 1 is necessary in order to determine the complete scope of the human element and level of data collection effort required.

Currently, the Human Element on the Dashboard consists of the Central Wasatch Commission's Visitor-Use Study conducted by Utah State University 2021-2023. This study explored outdoor recreation use and its associated impacts quantified through hourly trail use data. The DIGIT Lab proposes to expand the Human Element by including the recreation ecology of the Central Wasatch. More specifically, assess the impacts of recreation on the natural resources (i.e. geology & soil, vegetation, wildlife, water and air quality) and the pattern and trends of these impacts (i.e. how and where people are going). The DIGIT Lab will team with Professor Kirk Nichols of the University of Utah's Department of Parks, Recreation & Tourism to perform Phase 1.

In order to objectively present recreation ecology, the DIGIT Lab team proposes to lead a short series of charrettes with technical experts to determine the appropriate framework and indicators for recreation ecology and its sub categories. The outcomes of these charrettes will be summarized, evaluated, and a final indicators recommendation list presented to the technical experts and the steering committee for approval.

Once the framework and indicators are finalized, another charrette will be held with the technical experts to assess the required data needs. This discussion will include reviewing known existing data sources and identifying all new data collection needs. In addition to compiling a desired data set list, new data collection needs will be prioritized to assist with Phase 2 implementation.

The following tasks are included in Phase 1:

Phase 1

1.0 Framework and indicator finalization

- 1. Framework technical charrettes - review current Human Element with technical experts and expand to include recreation ecology**

- a. Minimum of two sessions (impacts to resources, impact patterns and trends))
 - i. Preparation required prior to each session
 - ii. In-person group sessions (2 hours each)
 - iii. Summarization following each session
 2. Framework and indicator finalization – final determinations
 - a. Compile feedback and outline potential final determinations
 - b. Present potential final determinations to technical experts
 - c. Revise framework and indicators based on technical experts’ review
 - d. Produce final list of indicators and associated details in a final indicator workbook
- 2.0 Data Set Needs and Prioritization
1. Data technical charrettes – review existing data, outline and prioritize new data collection needs
 - a. Minimum of two different sessions (impacts to resources, impact patterns and trends))
 - i. Preparation required prior to each session
 - ii. In-person group sessions (1.5 hours each)
 - iii. Summarization following each session
 2. Data collection finalization
 - a. Review feedback and create comprehensive data needs list
 - b. Prioritize data needs list
 - c. Review data list prioritization with technical experts
 - d. Compile projected data collection costs per data set with assistance from technical experts
- 3.0 CWC Coordination
1. Facilitate storyboarding workshop with the Stakeholders Council and public reviewing the current Environmental Dashboard’s look, feel, and usability in February 2025
 2. Prepare five monthly progress reports (March, April, May, June, July) to CWC staff
 3. Hold monthly 1-hour meetings with CWC staff (March, April, May, June, July)

On the completion of Phase 1, the project team will finalize the list of tasks needed to bring the expand Human Element to fruition within the Environmental Dashboard and will submit a second Phase 2 proposal which will generally consist of highest priority data collection needs and associated analyses.

Schedule for Phase 1 (Assuming a February 1, 2025 start date):

1. Preparation for technical charrettes (review of Human Element, identifying and engaging technical experts) completed by ***March 15, 2025***
2. Scheduling and hosting of initial round of technical charrettes completed by ***April 30, 2025***
3. Summarization of technical charrettes and final list of recommended indicators completed by ***June 15, 2025***
4. Summarization of technical data charrettes and final list of prioritized data collection needs completed by ***August 1, 2025***

Deliverables:

The following is a list of the deliverables for Phase 1:

1. Summary report of the technical charrettes
2. List of final indicators for the Human Element
3. List of existing data sets and future required data sets
4. List of priority data collection needs with associated costs to build out the recreation ecology phase of the Human Element

Costs:

The costs associated with performing these **Phase 1** tasks are outlined in the table below.

Task	Team Hours	Cost
1.1 Framework technical charrettes	97	\$9894
1.2 Framework and indicator finalization	64	\$6528
2.1 Data technical charrettes	39	\$3978
2.2 Data collection finalization	174	\$17,748
3.0 Coordination	25	\$2550
Total Direct Cost		\$40698
Indirect Cost (10%)		\$4069.8
Total Cost		\$44,767.8