

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Going to the Sun Road Corridor Planning in Glacier National Park

Type of Project: Research
Discipline: Social
Funding Agency: National Park Service
Other Partners/Cooperators: University of Montana
Effective Dates: 1/16/2011 - 2/28/2013
Funding Amount: \$117,457

Investigators and Agency Representative:

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Project Abstract: The overall goal of this proposed research is to gain a more integrated understanding of visitor use and experience of the Going to the Sun Road (GSTR) corridor including the on the ground conditions of visitor use and experience and park resources at key points in the GTSR corridor; the impacts of the shuttle and changing visitor numbers on visitor use patterns and experiences and physical and natural park resources; and visitor expectations and actual experiences with the GTSR corridor. This research is intended to provide background information for a larger planning exercise for the future of the GTSR corridor. The study will address the following specific research questions:

Current visitor experience in the GTSR corridor

- What is the baseline of visitor use and experience on the shuttle, at roadside viewpoints, and on adjacent trails - especially those trails made more accessible by the shuttle system like the Highline Trail, Siyeh Bend, and St Mary's Lake?
- How does the presence of the shuttle influence use of other trails on the corridor? Are the dynamics observed at the Highline Trail being replicated at St. Mary's falls, Avalanche, Siyeh bend, etc. What are the actual use levels on these and other arterial trails?
- How does the shuttle system fit into the overall visitor use patterns in the park? Do visitors use the shuttle for the entire visit or selected portions of the visit? How much traffic is truly alleviated and how much carbon is offset by shuttle use?
- How does the baseline experience of what visitors want out of their experience in the GTSR corridor compare to what they are currently experiencing?
- How do visitor numbers affect visitor experience?
- Are visitors willing to make trade-offs with trail access or parking behavior to attain the desired experiences? At what level of visitor density would visitors support management actions that will ensure desired experiences? Do these desired experiences and levels of support vary by trail? For example do visitors expect and accept that the Highline Trail is a busy corridor but expect greater solitude on other trails?

Influence of park infrastructure on visitor experiences and preferences

- How do visitors' experiences on the shuttle and with the park transit corridor and physical infrastructure in the park influence people's experience on the trail and their views about management options to regulate the corridor?
- What are the most effective ways to present information about park resources, impacts, visitor behavior, and regulations to visitors?
- How does visitors' experience in the GTSR corridor influence their behavior while in the park and their "after visit" behavior, beliefs, etc?
- Specifically, how does the shuttle ride itself influence the rider's experience and their perception of the purpose of the shuttle and the park? How could different messages to visitors on the shuttle influence their perception of the park's purpose, their responsibility as visitors, willingness to make trade-offs to protect the environment or social conditions and the potential to live a more sustainable lifestyle at home?

Additional questions that will need to be addressed in a larger, comprehensive planning effort include:

Future vision for the GTSR corridor

- What is the overall vision for the road corridor including the roadside viewpoints, the shuttle, and adjacent trails from the perspective of park visitors and park management?
- What are the key criteria for understanding if changes to this system are good or bad?
- What are visitors' specific desired experiences on GTSR trails? What are the specific desired social and ecological conditions for the trail network that is directly linked to the GTSR corridor? What experiences should be provided and monitored on these trails?
- What level of ecological impacts (e.g., wildlife encounters, vegetation loss, etc.) are related to those experiences and how acceptable are they?
- What are the objectives for visitor flows at primary parking areas?
- How can (or should) the shuttle system and GTSR corridor use regulations evolve from being a tool primarily designed for road traffic mitigation to a tool for facilitating desired conditions within the corridor?
- How do road corridor planning and improvements and the shuttle system influence visitor's overall experience in the park including experience on the trails, at the stops, parking, etc?
- What kinds of visitor use and resource regulations best support visitors' desired experiences while protecting park resources?
- What tradeoffs would visitors be willing to make to protect desired experiences and park resources?

To address these issues, park staff agreed that within 3-5 years, a more detailed plan for the corridor would be very useful in ensuring that the Glacier visitor experience remains extraordinary and that the pristine environment remains protected. To address these research goals and support this planning effort, the project proposed here is divided into three phases. Phases one of will be completed in the summers of 2010 and 2011. This is the project proposed in this Task Agreement. In those phases, visitors will be observed and surveyed in the Logan Pass area and at pullouts that facilitate looped trail hiking on the Going to the Sun Road. Actual use levels on key trails will also be estimated. Through this work we will develop a better picture of the relationship between shuttle use, infrastructure use and experience quality is developing within the corridor.

The second phase of the work will occur in 2012 and 2013. This will constitute working together on a visitor management plan for the corridor and continued monitoring of use levels. Phase three will constitute continued monitoring of the road and trail use patterns after the road construction is completed in 2013. The park and the PI will pursue other funding sources for these phases and if successful, will be covered under a separate agreement.

Outcomes with Completion Dates: February 28, 2013

Keywords: planning, visitor experience, Going to the Sun Road Corridor, Glacier National Park, University of Montana