

# Alternative Transportation and Parking Strategies for the Kīlauea Point National Wildlife Refuge

**Alex Roy**  
Public Lands Transportation Scholar  
Kaua'i National Wildlife Refuge Complex

## What is the Transportation Scholars Program?

The Public Lands Transportation Scholars program provides public lands with transportation professionals for six to 12 months who assist in transportation planning and implementation to help public lands reduce traffic, congestion and pollution while improving visitor experiences. These programs are designed to place individuals with substantial knowledge and expertise in transportation planning and related areas. *See footer for a list of sponsors.*

## Background

### Kīlauea Point National Wildlife Refuge

- Located on Kaua'i, Hawaii
- Part of the U.S. Fish and Wildlife Refuge System
- Only refuge on Kaua'i providing visitor services
- An average of 400,000 people a year visit the Refuge. Around half pay an additional entrance fee to access the Refuge beyond the Overlook
- One of the top 20 visited US Fish and Wildlife refuges
- Established in 1985
- Multiple conservation purposes, including providing habitat and protection for migratory birds, preservation of species, and the conservation and management of threatened and endangered native flora and fauna
- Refuge is home to the historic Daniel K. Inouye Kīlauea Point Lighthouse



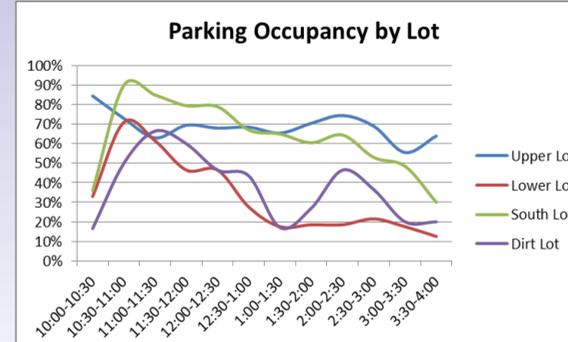
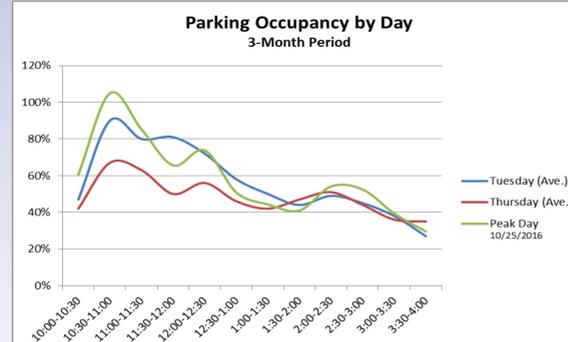
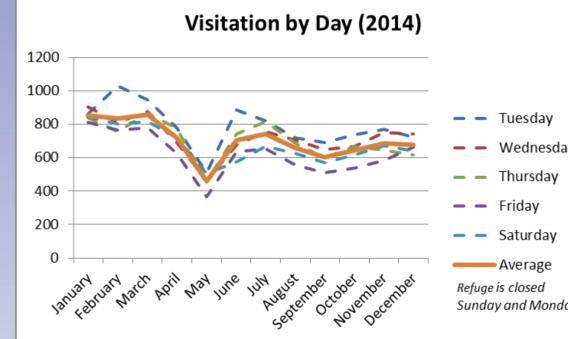
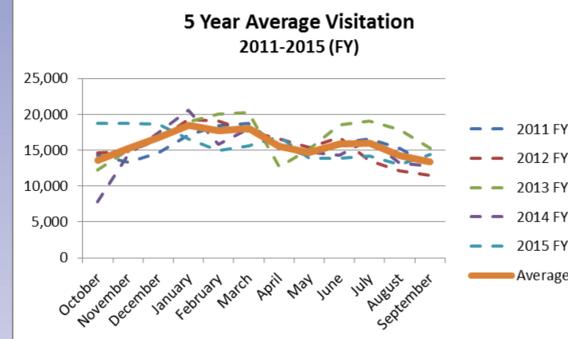
### Transportation Concerns

- High visitation
- Wildlife nesting areas adjacent to roads, pedestrian paths, and parking lots
- Primarily tourists, limiting local knowledge and outreach regarding alternatives to private vehicles
- Parking demand exceeds capacity during peak periods causing congestion & queuing
- Limited staffing
- Steep and narrow driveway, with close proximity to nesting areas prohibits expansion to allow active transportation, currently prohibited beyond the Overlook
- Limited active transportation infrastructure (sidewalk, bike lanes) on Kīlauea Rd. (County owned) accessing the Overlook



## Data Collection / Existing Conditions

Unlike many U.S. Fish and Wildlife Refuge Refuges and other natural lands, Kīlauea Point NWR does not experience high seasonal visitation variations. The seasonal change is typically in the 17-18% range, while National Parks and other natural lands within the contiguous U.S., such as Zion, frequently see decreases greater than 70% in the winter. In order to identify small term variations, an extensive data collection and historic data review was conducted. The primary purpose of this effort was to identify monthly visitation trends, daily peak periods, underutilized locations, and inefficiencies in the current system. Moving forward the Scholar will work with Refuge staff to use this data in evaluating and determining the operations of the proposed transportation alternatives.



## Transportation Alternatives

### Shuttle System

Kīlauea Point NWR, along with Central Federal Lands Highway Division and the Volpe Center, has developed a shuttle implementation report over the past year.

- Report studied implementing both a mandatory shuttle and an optional shuttle
- Implementing a mandatory shuttle represents a significant departure from current practice, but it could potentially alleviate capacity and congestion concerns
- The shuttle would also help the Refuge move toward long-term sustainability
- A shuttle system could also potentially allow pedestrian and bicycle access past the Overlook.
- Different shuttle operational models, pickup locations, and shuttle options were evaluated according to ease of implementation, travel time, cost effectiveness, community support, and environmental impact.

Next Step: The Scholar will work with Refuge staff and partner organizations to determine feasibility of shuttle alternatives.



### Parking Reservation System (Shuttle Alternative)

#### Pros:

- Cheaper
- Does not provide excess capacity when not needed
- Will not require use of non-FWS parking lot
- Could be modified in the future
- More convenient for families & handicapped
- Alert FWS staff regarding peak visitation

#### Cons:

- Requires prior planning by visitors
- Potential to increase staff workload
- Unproven system
- Costs could be higher than expected depending on hardware
- Does not allow potential bus tour experience



### Active Transportation Improvements

As part of the Federal Lands Access Program (FLAP) the County of Kaua'i and the Kīlauea Point NWR are working together to improve pedestrian and bicycle access to the Overlook. This project highlights active transportation designs including new crosswalks, sidewalks, paths, signage, and parking lot reconfiguration.

