# U.S. Fish and Wildlife Service
# Regional Alternative Transportation Evaluation Report – Region 1
# January 21, 2011

*A regional non-motorized trail in close proximity to the McNary National Wildlife Refuge (Courtesy of the Volpe Center)*

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## RATE Background

The U.S. Fish and Wildlife Service (FWS) and the U.S. Department of Transportation (DOT) Volpe Center (Volpe Center) conducted a regional alternative transportation evaluation (RATE) in Region 1, which is comprised of Oregon, Idaho, Washington, and Hawaii, to ensure effective consideration and integration of alternative transportation systems (ATS, Box 1) into the goals and recommendations of the Region 1 LRTP. The Region 1 RATE was also meant to serve as a pilot for the integration of ATS into the National FWS Long Range Transportation Plan (LRTP). Staff from the Volpe Center, FWS Region 1, and Western Federal Lands Highways (WFLH) met in Portland, Oregon, in October 2010, to discuss alternative transportation needs and constraints in the region and to develop an ATS Questionnaire. Volpe Center staff also visited Ridgefield National Wildlife Refuge (NWR), Steigerwald Lake NWR, the Mid-Columbia Refuge Complex, and the Spring Creek National Fish Hatchery to identify specific opportunities for ATS in these and other stations. The RATE also provided lessons on how ATS may be instituted more broadly across Region 1.

**Box 1: What are Alternative Transportation Systems?**

Alternative transportation systems generally include any travel means other than personal automobile, such as:

- Motorized transportation systems operating internally within stations
- Shuttles and van transit connecting stations with other destinations
- Regional transit connections (bus, light rail, trolley, commuter rail, passenger rail)
- Bicycle and pedestrian infrastructure (sidewalks, paths, bicycle lanes, regional trails)
- Water-based transportation
- Publicly and privately operated systems

FWS Headquarters and Regional staff approached the RATE with the understanding that increased ATS would be beneficial to Region 1 stations and complement Service-wide goals, particularly those contained in the Region 1 LRTP. First, the use of transit, non-motorized, and water-based modes supports natural resource protection. By reducing the use of personal automobiles, FWS can also reduce the impacts that these vehicles have upon natural resources. Vehicular resource impacts include wildlife collisions, invasive species, noise pollution, particulate emissions, erosion, and pollutants that can enter the soil or water. Over the long term, increasing ATS for stations with increasing visitation can minimize the need for new roads or parking, thus preserving more area for wildlife habitat. ATS can also be a critical visitor management tool for station staff facing increasing visitor demands and limited resources. The use of transit can enhance visitors' understanding of the station's natural resources by facilitating interpretive tours or directing visitors for special events. Signage and orientation information directed at non-automobile modes can also help integrate these modes effectively into station transportation. Finally, ATS can reduce the Service's carbon footprint, reduce the use of carbon-based fuels, enhance accessibility, and reduce air pollutants emitted from vehicles.

## Key Findings

Based on the station visits and strategic discussions, the following are key findings and outcomes from the RATE:

- The RATE team identified mechanisms to integrate ATS into the LRTP, including the creation of new text for the Sustainability goal area and an ATS Appendix.
- The RATE team developed and refined the ATS Questionnaire, which was circulated among all stations in Region 1 (see Appendix).

- The RATE team identified several opportunities for improving ATS to and within the stations visited, which are described in detail later in this report.
- Several stations already use transit for festivals, working closely with community and regional partners and transit providers to rent vehicles.
- Some stations aiming to increase their visitation and interpretive services found potential for ATS as a tool to help achieve this goal. Other stations expressed reluctance to pursue ATS based on limited staffing to manage existing (or growing) visitation.

## Region 1 Trends

The Region's stations are diverse in their visitation and associated transportation patterns, but a few *visitation* trends emerge that inform ATS needs and planning:

1. Stations near major urban areas and along the Interstate 5 corridor attract (or have the potential to attract) high visitation from urban and suburban residents, and they often have visitor amenities such as hiking trails, auto tour routes, education programs, and wildlife art to serve those visitors.
2. Several stations outside of population centers contain special resources that attract high visitation, making these "destination stations." Almost all visitors must travel to these stations by personal vehicle.
3. Several stations across the region have special events and festivals with significant spikes in visitation that necessitate temporary visitor management and transportation strategies.
4. Many stations host local and regional school groups for field trips to view their natural and cultural resources; a few stations have facilities that can specifically accommodate these groups.
5. The majority of Region 1 stations are outside of the service district of public transit providers.
6. Many of the gateway communities near stations have extensive existing non-motorized infrastructure and residents that frequently bicycle for transportation and recreational purposes.
7. Station staff encourages visitors to stay in their cars on auto tour routes. Wildlife are accustomed to vehicles but not necessarily to pedestrians or bicyclists.
8. Many stations in the region utilize water-based transportation for access. This access includes both motorized and non-motorized boats for recreation and transportation purposes.
9. Demographic trends may lead to more elderly residents in the region, including more people who do not or cannot drive. Other regional trends may include smaller vehicles, electric vehicles, and affordability of transportation.
10. Regional and station staff use refuge websites, brochures, and local media to promote visitation.

Additionally, conversations with Region 1 FWS staff and WFLH staff revealed several trends about *transportation planning* in the region:

1. Due to the 2012 deadline to complete Comprehensive Conservation Plans (CCPs) for all refuges, most CCPs have limited inclusion of transportation. Instead, the CCPs for more complicated stations recommend step-down plans to address transportation in a more meaningful way. Region 1 will work with some stations to complete these technical transportation components of step-down plans. Region 1 has also considered working with Western and Central FLH to hire a transportation planner to work on these plans across the region.
2. Region 1 and WFLH staff have worked with stations to increase the number of transportation studies completed in the past two years. These studies include traffic safety, site planning, and evaluation for paving a refuge road. The studies tend to be piecemeal in fashion and they do not consider greater needs of a station or the region.
3. Transportation project requests tend to be small in scale. Station staff is not accustomed to thinking about transportation needs on a broad or long-term scale.

4. Region 1 is starting to work with WFLH to scope visitor transportation patterns and safety needs across the region.
5. The region takes advantage of Transportation Enhancement and Scenic Byways funds for transportation facilities. However, stations in Region 1 have had limited participation in the Paul S. Sarbanes Transit in Parks (TRIP) program. Station staff believes that their applications are not likely to get funded, making them an unwise investment of staff time.

## Region 1 Strategies for ATS

Conversations with FWS regional and station staff, as well as with WFLH staff, indicate several planning and management strategies can help Region 1 and its stations use ATS. These strategies include types of ATS that would work well in specific stations, such as off-road pedestrian connections to gateway towns, and management and planning actions at the station and regional level that can increase ATS use, such as partnerships with local transit agencies.

For each of the stations included in the RATE, several key strategies would help effectively and appropriately increase ATS. These strategies are as follows:

- Use of transit for special events: Refuge staff can use buses and vans for wildlife observation tours, parking shuttles, or other transportation services during festivals or special events when visitation is much higher than normal.
- New or improved pedestrian and bicycle facilities: Non-motorized paths, bicycle lanes, bicycle racks, and signage for non-motorized users are important tools to connect stations with existing non-motorized trail networks, gateway towns, and local and regional amenities. In some cases, existing connections can be strengthened or updated to increase their usability.
- Promotion: Stations can advertise existing and underutilized ATS connections through the station website, brochures, local media, and station staff.
- Partnerships: Transit agencies, local governments, other State and Federal agencies, and friends groups can help to enhance or add new transit service, fundraise for new or improved non-motorized infrastructure, promote existing connections, and provide transit for special events. Partnerships with transit agencies are the first step to connect urban and suburban stations within transit service areas to local bus routes.
- Staff to handle special events and increased visitation: Many stations have limited staff capacity to plan for, manage, or implement ATS or to handle general increased visitation. With additional staff coverage for times of high need, stations may better be able to use ATS tools to address visitor management challenges. Volunteers and friends groups may also help to temporarily bolster staff capacity.
- New signage and signage guidance: Several stations have a need for signage to address visitor orientation, especially as related to orientation of visitors using transit or trails for access to the site or internal mobility.

## Summary of Station Opportunities and Strategies

This section lists a brief description of relevant characteristics and transportation connections at each station visited during the RATE. Each station also has a list of Opportunities and Needs, as well as the identification of the above strategies best suited for the station.

### Ridgefield NWR

#### *Existing Conditions*

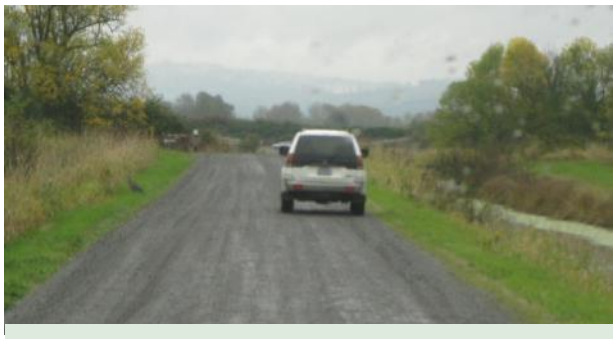


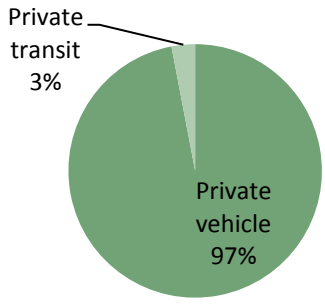
***Figure 1:*** *A visitor views wildlife along the Ridgefield auto tour route. (Courtesy of the Volpe Center)*

The Ridgefield NWR attracts approximately 125,000 annual visitors for wildlife observation, interpretation, educational programs, hunting, and fishing. The most popular visitor amenities, including an auto tour road (see Figure 1) and the Cathlapotle Plankhouse, are located within two miles of the downtown area of Ridgefield, Washington. A new Nature Center will be located one mile from the downtown area. A new access road to the refuge will redirect visitors through the Port of Ridgefield, which will provide a more direct and accessible connection between the refuge and Ridgefield and allow visitors to more easily access the auto tour route. Ridgefield also attracts 3,000 visitors annually through its Environmental Education program for school children. Finally, Ridgefield hosts the popular annual BirdFest in October. During this time, Ridgefield closes the auto tour route to private vehicles and uses charter buses to give visitors interpretive tours of the route. The refuge also uses the County's community education buses to shuttle visitors between parking lots and BirdFest attractions.

#### *Opportunities and Needs*

- A sidewalk to accommodate pedestrians and bicyclists partially covers the distance between downtown Ridgefield and the new Nature Center, but there is an opportunity to create a non-motorized trail to complete the connection. The new trail, sidewalk, and/or bicycle lane should be planned in conjunction with Nature Center construction.
- BirdFest already incorporates alternative transportation for parking and interpretive tours; this ATS should be continued and expanded for other events. Region 1 should also support Ridgefield NWR staff in sharing their lessons and successes from this event with other stations.
- The station could benefit from bicycle racks at their new visitor center or at trailheads, promotion and marketing for future ATS, and connections to funding sources to update their aging infrastructure.

**Figure 2: Mode Share at Ridgefield NWR**




#### *Relevant Strategies*

- Use of transit for special events
- New or improved pedestrian and bicycle facilities
- Staff to handle special events and increased visitation

## Steigerwald Lake NWR

### *Existing Conditions*

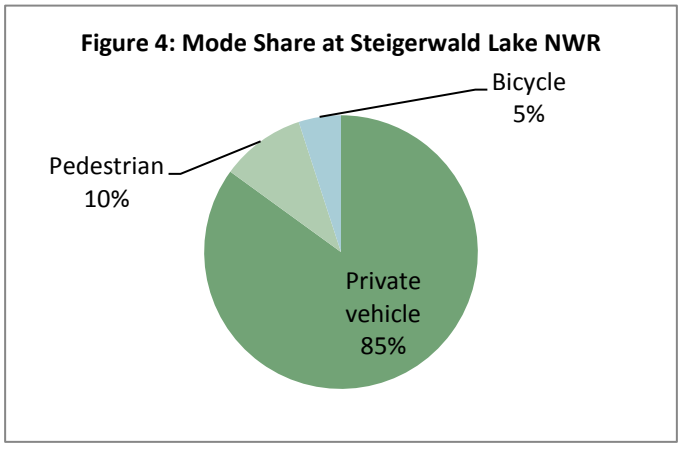
Steigerwald Lake NWR opened the Gibbons Creek Wildlife Art Trail, its first public-use amenity, in 2010. The trail is expected to attract increased recreational visitation from the nearby cities of Washougal and Camus, Washington. The 2.75 mile gravel and boardwalk Gibbons Creek Trail also connects with the Columbia River Dike Trail, allowing access to the refuge from other points along the Columbia River. The Dike Trail is a gravel-surface trail that extends 3.5 miles along the Columbia River for use by pedestrians, bicyclists, and equestrians.

Steigerwald Lake is located approximately one-half mile from a C-TRAN bus stop (C-TRAN is the transit agency serving the Vancouver metropolitan area). Bus Route 92 serves the stop and offers frequent service (every 30 minutes Monday through Saturday and hourly on Sundays), seven days a week, to the Washougal/Camus area (see Figure 3). The bus does not travel on Highway 14; the out-and-back route utilizes a turnaround on a side street on the north side of Highway 14 (the refuge entrance is on the south side of Highway 14 0.5 miles from the turnaround). Currently, there are no pedestrian or bicycle facilities along Highway 14 between the turnaround and the refuge entrance, including no safe means of crossing Highway 14.

***Figure 3:*** *The C-TRAN bus stop is located within one-half mile of the Steigerwald Lake NWR visitor facilities. (Courtesy of the Volpe*

### *Opportunities and Needs*

- Refuge and regional staff can work with C-TRAN to improve transit connections to the refuge. For example, C-TRAN could use the refuge parking lot as the turnaround for Route 92 or add an additional stop at the refuge entrance during weekends or special events.
- Access to the new Gibbons Creek Wildlife Art Trail from the existing Columbia River Dike Trail should be improved through promotion and signage. First, refuge and regional partners should promote non-motorized refuge access via the Dike Trail. Second, the refuge can provide bicycle racks at the trail intersection to avoid prohibited bicycle use on the Gibbons Creek Trail. Refuge staff should also consider signage along the Dike Trail to promote connection to the refuge.




### *Relevant Strategies*

- Promotion
- Partnerships with transit agency
- New or improved pedestrian and bicycle facilities
- Staff to handle special events and increased visitation

## McNary NWR *(Mid-Columbia Refuge Complex)*

### *Existing Conditions*

The McNary NWR is the highest-use refuge in the Mid-Columbia complex, with approximately 70,000 visitors annually. Located in Burbank, Washington, the refuge is located in close proximity to the Tri-City metropolitan area, with a population of approximately 240,000. The visitation at McNary is expected to increase, due in part to the new Education Center, opened in 2009. The refuge facilities also include interpretive trails, unpaved roads, and parking for wildlife observation. The peak visitation season for wildlife observation is November to March, coinciding with bird migration. Numerous school groups visit McNary for field trips, with peak school group visitation occurring between April and June. The refuge also hosts monthly Second Saturday events with educational and interpretation activities, which draw up to 200 visitors per event. The refuge staff cite goals to increase visitation, and they would like to pursue promotional activities and partnerships, such as with the Tri-Cities Visitors' Bureau, to increase visitation.

***Figure 5:*** *Pedestrians face conflicts with vehicles along Lake Road at McNary NWR. (Courtesy of the Volpe*

Washington DOT plans to create an overpass on Highway 12 at Humorist Road, which is a principal vehicular access point for the Education Center. Traffic to the refuge will then be diverted onto Lake Road, a narrow, two-lane paved road. Lake Road currently has fairly high traffic, with numerous trucks and buses, making it unfeasible for safe pedestrian passage (see Figure 5). Traffic will likely increase on Lake Road as a result of the new overpass.

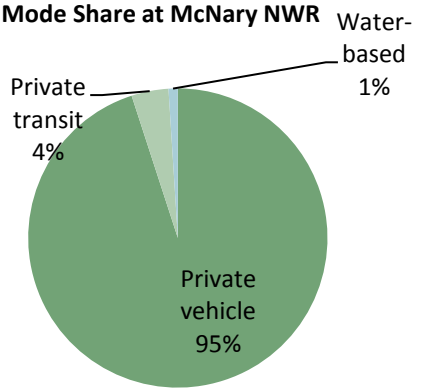
### *Opportunities and Needs*

A U-shaped trail connected to the Education Center begins and terminates at Lake Road, but there are no pedestrian facilities or shoulder along the road. As a result, pedestrians often only use the segment of trail closest to the Education Center to avoid out-and-back trips. In particular, school groups do not cover the entire trail because the students cannot safely return to the Education Center along Lake Road. Pedestrian facilities connecting the trailheads, such as a boardwalk or sidewalks, would allow for enhanced visitor experience and safety improvements.

The Education Center is located within three miles of a connection to a regional bicycle and pedestrian trail network. An existing bicycle and pedestrian separated path on the Snake River Bridge terminates in Burbank, but an informal, unpaved path circles under the bridge to potentially connect users to Hood Park (both the informal path and Hood Park are owned by the U.S. Army Corps of Engineers). FWS owns land that could potentially provide a direct non-motorized trail connection to the Education Center. FWS could partner with Washington DOT and request in-kind support for design and engineering of such a trail.

As visitation increases, the refuge staff may consider using transit for special events, such as Second Saturday events.

**Figure 6: Mode Share at McNary NWR**



### *Relevant Strategies*

- Promotion
- New or improved pedestrian and bicycle facilities
- New signage and signage guidance
- Use of transit for special events

## Columbia NWR *(Mid-Columbia Refuge Complex)*

### *Existing Conditions*

The Columbia NWR is located within the Columbia Basin of east-central Washington, with headquarters in Othello, Washington. Visitor facilities include unpaved roads, interpretive trails, parking, and boat launching areas. Horses and bicycles are permitted on roads that allow vehicular use but not on walking trails. Fishing is a very popular refuge activity, with many visitors accessing the refuge by boat from connecting waterways. The Audubon Refuge Keepers (ARK) runs a significant education program at the refuge, serving approximately 1,500 students annually through field trips. Audubon uses private fundraising to pay for buses for school groups. Additionally, the annual Sand Hill Crane Festival in March attracts at least 1,500 visitors. The refuge contracts with a local school district to use buses for visitor management at this event.

### *Opportunities and Needs*

- Promote existing transit use (through ARK education program and Sand Hill Crane Festival) as models for other rural refuges.
- The refuge is located within the Ice Age Floods National Geologic Trail; there is potential to include the refuge in the National Park Service (NPS) Ice Age Floods interpretive driving trail.

### *Relevant Strategies*

- Partnerships with NPS and friends groups
- Use of transit for special events

## Hanford Reach National Monument *(Mid-Columbia Refuge Complex)*

### *Existing Conditions*

The National Monument is owned by the U.S. Department of Energy and managed by FWS. Located in Richland, Washington, it is the only refuge in the Mid-Columbia Complex that is both open to public use and within the service area of Benton-Franklin Transit. Most roads on the refuge are gravel surface, open to vehicles and bicycles.

### *Opportunities and Needs*

- The Monument is within the service area for Benton-Franklin Transit, though there are currently no bus stops nearby. Developing transit connections is a long-term possibility as visitation increases.
- There are opportunities to develop or improve boat launch facilities to encourage refuge access via the Columbia River, which is currently limited due to the distance between launch sites.
- Several road segments, currently closed to vehicles, could be opened and improved for use by bicyclists and pedestrians to offer more complete non-motorized access through the site.

### *Relevant Strategies*

- New or improved pedestrian and bicycle facilities
- Partnerships with transit agency

## Umatilla NWR *(Mid-Columbia Refuge Complex)*

### *Existing Conditions*

The Umatilla NWR is located on the south shore of the Columbia River near Irrigon, Oregon, and is popular for hunting, fishing, and wildlife observation. The Columbia River Heritage Trail, a multi-use, paved trail, runs through the McCormack Unit of the refuge and connects to Irrigon, and other nearby towns. The trail follows the auto tour road and also continues as a paved trail through other parts of the refuge (see Figure 7). The Umatilla Comprehensive Conservation Plan calls for an improved and relocated trail and trailhead to increase access for non-motorized users, reduce conflicts with other modes, and better utilize existing refuge facilities.


***Figure 7:*** *The Columbia River Heritage Trail coincides with the Umatilla NWR auto tour route. (Courtesy of the Volpe Center)*

### *Opportunities*

- The Columbia River Heritage Trail connections to other regional destinations could be reinforced or promoted in the future. A realigned and improved trail should incorporate a proposed loop trail and boardwalk, interpretive displays, wildlife observation/photo blind, and the existing Callow's Overlook Memorial.

### *Relevant Strategies*

- New/improved bicycle and pedestrian infrastructure

## Conboy NWR *(Mid-Columbia Refuge Complex)*

### *Existing Conditions*

The Conboy Lake NWR, located near Glenwood, Washington, is popular for scenic vistas, elk and crane viewing sites, and birding observations. The refuge currently has one nature trail, which the local Chamber of Commerce advertises through a promotional brochure.

### *Opportunities and Needs*

- The relationship with the Chamber of Commerce could provide a good model for other rural refuges regarding promotional partnerships and visitor decisions about travel.
- The refuge would like to include a second wildlife viewing trail and an auto/bicycle tour route around the refuge.

### *Relevant Strategies*

- Promotion
- Partnerships

## Spring Creek National Fish Hatchery (NFH)

### *Existing Conditions*

Spring Creek NFH is located in the Columbia River Gorge just west of White Salmon, Washington, and across the river from Hood River, Oregon, two popular visitor destinations. The hatchery receives 60,000 visitors annually, with most visitors concentrated in the six week salmon spawning season from August to October. The facilities are only open during the weekdays, so most visitors are school groups, retirees, and tourists. The hatchery is adjacent to a popular state park windsurfing staging area, with 15,000 or more visitors during peak months. The hatchery generally has good relations with the state park and windsurfing groups, but crowd management remains an issue for the hatchery.

### *Opportunities and Needs*

- FWS recently repaved the access road to their facilities, including the portion that goes through the State Park, using Fisheries Deferred Maintenance funds. Repaving included a pedestrian "lane" running from the Highway 14 entrance to the hatchery buildings.
- Signage along the entry road is prolific and, at times, confusing. Hatchery staff would like guidance on FWS signage as a transportation management tool.


***Figure 8:*** *A sign alongside the pedestrian "lane" orients visitors around Spring Creek's buildings. (Courtesy of the Volpe Center)*

### *Relevant Strategies*

- New signage and signage guidance
- Promotion

## Region 1 ATS Needs

The following information and findings are based on station visits during the RATE, conversations with Region 1 staff, and/or responses to the ATS Questionnaire.

| | Refuge | Transit Distance | Trail Distance | Priority |
|---|---|---|---|---|
| 1 | **Steigerwald Lake NWR**<br>*Washougal, WA* | Less than ½ mile | Direct connection | High |
| | • Extend C-TRAN bus service to refuge entrance, or provide safe pedestrian passage from current bus stop to refuge entrance.<br>• Promote existing non-motorized access via the Columbia River Dike Trail. | | | |
| 2 | **Kealia Pond NWR (HI)**<br>*Kihei, HI* | 1.5 miles | Less than ½ mile | High |
| | • Work with Maui Bus to provide a new bus stop near the refuge entrance between Kihei and Maalaea.<br>• Promote existing non-motorized access via the Mokulele Highway bike path. | | | |
| 3 | **Ridgefield NWR**<br>*Ridgefield, WA* | More than 3 miles | 1-3 miles | High |
| | • Provide a non-motorized trail to downtown Ridgefield and link with existing sidewalks.<br>• Promote and expand the use of transit for Bird Fest and other special events. | | | |
| 4 | **Tualatin NWR**<br>*Sherwood, OR* | Less than ½ mile | Direct connection (future) | High |
| | • Promote the use of existing Tri-Met bus service for connections to bicycle and light rail networks.<br>• Support and promote the use of trail connections via Metro's Toquin and the City of Sherwood's trail systems. | | | |
| 5 | **Kauai NWRC/Kilauea Point NWR**<br>*Kilauea, HI* | ½ - 1 mile | ½ - 1 mile | High |
| | • Provide a shuttle to connect the Kilauea Point NWR to Kauai Bus service or to the town of Kilauea.<br>• Enhance opportunities for bicycle and pedestrian access. | | | |
| 6 | **Nisqually NWR (WA)**<br>*Olympia, WA* | 2 miles | More than 3 miles | High |
| | • Work with Intercity Transit to extend bus service between the refuge and the Olympia region. | | | |
| 7 | **McNary NWR**<br>*Pasco, WA* | More than 3 miles | 2 miles | Medium |
| | • Provide pedestrian facilities along Lake Road to offer safe pedestrian access between trailheads.<br>• Provide a bicycle and pedestrian trail to connect with the Snake River Bridge and the extensive regional trail network. | | | |
| 8 | **Leavenworth National Fish Hatchery Complex**<br>*Leavenworth, WA* | Less than ½ mile | More than 3 miles | Medium |
| | • Provide a regional, non-motorized trail for pedestrian and bicycle access to the complex, with potential connection to the Apple Capital Loop Trail.<br>• Promote the use of existing LINK bus service. | | | |
| 9 | **Turnbull NWR**<br>*Cheney, WA* | More than 3 miles | Direct connection | Medium |
| | • Connect the Columbia Plateau Bicycle Trail to the station's public use area, visitor contact area, and headquarters. | | | |
| 10 | **Koontenai NWR**<br>*Bonners Ferry, ID* | More than 3 miles | Direct connection | Medium |
| | • Partner with the County to provide a bicycle path connecting the refuge to Bonners Ferry. | | | |

| | Refuge | Transit Distance | Trail Distance | Priority |
|---|---|---|---|---|
| 11 | **Umatilla NWR**<br>*Umatilla, OR* | More than 3 miles | Direct connection | Medium |
| | • Promote and enhance connections via the Columbia River Heritage Trail. | | | |
| 12 | **Quinault NFH**<br>*Quinault, WA* | More than 3 miles | More than 3 miles | Medium |
| | • Potential connection with Olympic National Park via transit. | | | |
| 13 | **Oregon Coast NWR Complex**<br>*Western Oregon* | Unknown | Unknown | Medium |
| | • Provide a short-run shuttle bus in coordination with Ecola State Park.<br>• Identify other opportunities for comprehensive transportation links throughout the refuge, including the use of transit for special events. | | | |
| 14 | **James Campbell NWR**<br>*Hale'iwa, HI* | 3.5 miles | Unknown | Medium |
| | • Work with The Bus to provide transit service to the refuge. | | | |
| 15 | **Deer Flat NWR**<br>*Nampa, ID* | On-demand transit | 4 | Medium |
| | • Provide a non-motorized connection between the refuge and the Nampa to Stoddard Trail.<br>• Consider potential for transit as a means to access the refuge. | | | |
| 16 | **Willamette Valley NWRC**<br>*Corvallis, OR* | More than 3 miles | More than 3 miles | Low |
| | • Provide a Rail Trail for walkers and bicyclists.<br>• Use mini-buses to connect to the Corvallis Transit System. | | | |
| 17 | **Little Pend Oreille NWR**<br>*Colville, WA* | More than 3 miles | More than 3 miles | Low |
| | • Improve safety for bicycle access along State and County roads leading to refuge. | | | |
| 18 | **Abernathy Fish Technology Center**<br>*Longview, WA* | More than 3 miles | More than 3 miles | Low |
| | • Improve safety for bicycle access to refuge through a bicycle path along Highway 4. | | | |
| 19 | **Willapa NWRC**<br>*Ilwaco, WA* | More than 3 miles | NA | Low |
| | • Improve bicycle and pedestrian access between new station visitor center and the town of Ilwaco. | | | |

## Appendix: Region 1: Alternative Transportation Refuge Questionnaire

**Background:**
Region 1 has initiated a Long Range Transportation Plan (LRTP) to establish goals and objectives for transportation planning, improve the Service's transportation infrastructure, and optimize transportation funding decisions. The use of alternative transportation systems and access to stations brings potential benefits of resource protection, greenhouse gas emission reductions, and visitor management solutions. FWS and the U.S. Department of Transportation Volpe Center are conducting a regional alternative transportation evaluation (RATE) in Region 1 to ensure effective integration of alternative transportation systems into the LRTP. Completing this survey helps the Region identify future needs and opportunities.

Alternative transportation systems generally include any travel means other than personal automobile, such as:

- Motorized transportation systems operating internally within stations
- Shuttles and van transit connecting stations with other destinations
- Regional transit connections (bus, light rail, trolley, commuter rail, passenger rail)
- Bicycle and pedestrian infrastructure (sidewalks, paths, bicycle lanes, regional trails)
- Water-based transportation
- Publicly and privately operated systems

Current examples of alternative transportation systems in FWS include the Columbia River Dike Trail, offering non-motorized access to Steigerwald Lake NWR in Washougal, WA, and the Tri-Met bus that connects the Tualatin River NWR to other transit in Portland, OR.

***Please help us by answering the following brief questions:***

1. What is your station name?
2. Is your station open to public use?
3. How far from your station is the nearest transit service, such as a local bus stop or Amtrak station?
   Less than 1/2 mile ____ 1/2 to 1 mile____ 1 to 3 miles____ More than 3 miles_____

   Name of transit service provider:_____
4. Is there an opportunity for transit to assist you with special events at your station?
5. Is there an opportunity for transit to provide access for your general visitor (not during special events)?
6. How far from your station is the nearest bicycle and pedestrian regional trail?
   Direct connection to trail ____ Less than 1/2 mile ____ 1/2 to 1 mile____ 1 to 3 miles____ More than 3 miles_____
   Name of trail:_____
7. How would you estimate that most visitors access your station? (Please fill in approximate percentages):
   Personal vehicle ___ Public transit ___ Private transit (school bus, groups) ___
   Water-based access (including kayaks and canoes)__ Walking ___ Bicycling ____ Other___
8. Do school groups or friends groups provide transportation to your station via bus or van?
9. Which of the following are transportation challenges that your station faces (check all that apply)?
   a. Congestion on roads within station

b. Congestion on roads leading to station
c. Bus parking
d. Resource conflicts with cars or bicycles
e. Funding shortages (including fee collection)
f. Lack of transit service
g. Lack of safe pedestrian access
h. Staff capacity shortages
i. Distance from population centers
j. Condition of existing transportation assets
k. Appropriate and effective signage
l. At-grade railroad crossings
m. Have not considered transportation issues

10. Which of the following may enhance your visitor program?
    a. Internal transit – year-round
    b. Internal transit – seasonal
    c. New transit service for access to the station
    d. Pedestrian paths within station
    e. Pedestrian paths for access to station
    f. Bicycle paths within station
    g. Bicycle paths for access to station
    h. Bicycle racks
    i. Water-access facilities
    j. Promotion and marketing for existing and potential alternative transportation systems
    k. Parking management solutions
    l. Have not considered transportation issues

11. How would you estimate the demographics of your visitors?
    (Please rate each group using the following categories: Significant, Some, Few or None, No Information)
    a. Families
    b. Youth/school groups
    c. Senior citizens
    d. Mobility-impaired visitors
    e. Minority populations
    f. Low-income populations
    g. People who would use transit
    h. People who would bicycle

12. How would you estimate where your visitors live?
    (Please rate each group using the following categories: Significant, Some, Few or None, No Information)
    a. Within 10 miles of station
    b. Within 50 miles of station
    c. Tourists (more than 50 miles from station)
    d. International visitors

13. How would you estimate the activities enjoyed by your visitors? (Please rate each group using the following categories: Significant, Some, Few or None, No Information)
    a. Hunting
    b. Fishing
    c. Wildlife Observation
    d. Photography
    e. Environmental Education
    f. Interpretation

14. Does your station have any special events with high visitation?
    a. Please provide a few details about the special event(s):
    b. What is the name of the event?
    c. What is the event date?
    d. What is the approximate visitation for the event?

15. How do you handle heavy visitation for the event(s)?
    a. Use of transit
    b. Use of overflow lots on-site
    c. Partnerships for expanded parking off-site
    d. Other (please specify)_____

16. What are the most significant transportation problems or needs currently facing your station?

17. In the future, what might be the greatest opportunities for new or improved alternative transportation at your station?

18. Do you anticipate that visitation at your station will increase or decrease in the future?
    a. Increase
    b. Decrease
    c. Stay the Same

19. Are you actively trying to increase or decrease visitation?
    a. Increase
    b. Decrease
    c. Neither

20. How much of a concern is transportation with respect to changing visitation levels?
    a. High concern
    b. Potential/future concern
    c. Little or no concern

21. Would the station benefit from having a more detailed look at alternative transportation opportunities and challenges?
    a. Yes
    b. No
    c. Maybe

22. Is there any additional information related to transportation that you would like to share?

# REPORT DOCUMENTATION PAGE

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**14. ABSTRACT**

The U.S. Fish and Wildlife Service (FWS) and the U.S. Department of Transportation (DOT) Volpe Center (Volpe Center) conducted a regional alternative transportation evaluation (RATE) in Region 1, which is comprised of Oregon, Idaho, Washington, and Hawaii, to ensure effective consideration and integration of alternative transportation systems (ATS, Box 1) into the goals and recommendations of the Region 1 LRTP. The Region 1 RATE was also meant to serve as a pilot for the integration of ATS into the National FWS Long Range Transportation Plan (LRTP). Staff from the Volpe Center, FWS Region 1, and Western Federal Lands Highways (WFLH) met in Portland, Oregon, in October 2010, to discuss alternative transportation needs and constraints in the region and to develop an ATS Questionnaire. Volpe Center staff also visited Ridgefield National Wildlife Refuge (NWR), Steigerwald Lake NWR, the Mid-Columbia Refuge Complex, and the Spring Creek National Fish Hatchery to identify specific opportunities for ATS in these and other stations. The RATE also provided lessons on how ATS may be instituted more broadly across Region 1.

**15. SUBJECT TERMS**

Alternative transportation system, FWS, wildlife, visitation

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