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Klondike Gold Rush National Historical Park

Albert Faria, Acting Superintendent Jason Verhaeghe, Chief of Interpretation and Education

Transportation Advisory Group

A Transportation Advisory Group is a multi-disciplinary team, specializing in transportation issues in or near national parks. These teams typically include representatives from the National Park Service, and the US Department of Transportation (Federal Highway Administration and/or the Volpe National Transportation Systems Center). Klondike Gold Rush National Historical Park staff requested technical assistance on traffic and pedestrian issues near the park and (with the engagement of the Municipality) in Skagway near the cruise ship docks. Both agencies agreed to allow the Transportation Advisory Group to work briefly on the ground in Skagway, for field observations (July and September 2018) and meetings. Members of the Transportation Advisory Group technical support team included:

Roxanne Bash, Federal Lands Highway Western Federal Lands Planning Team
Linda MacIntyre, National Park Service Congestion Management Program, lead and co-author
Paul Schrooten, National Park Service Alaska Federal Lands Highway Program
Patrick Shea, National Park Service Project Manager
Erica Simmons, Volpe National Transportation Systems Center, co-author

Introduction

This Transportation Advisory Group (TAG) report summarizes the findings and recommendations from a series of workshops that assessed potential pedestrian and vehicle congestion issues in Skagway, Alaska, and at Klondike Gold Rush National Historical Park (KLGO). This project was a collaboration between the Municipality and Borough of Skagway and KLGO, who invited the TAG project team to provide technical assistance to support this effort. It is not intended to be a comprehensive transportation plan.

The primary purpose of this congestion assessment and TAG was to identify pedestrian and vehicle congestion issues in downtown Skagway, particularly related to heavy visitation days during the summer cruise ship tourism season. This report summarizes the following:

- The congestion assessment process, site observations, and public input;
- Skagway's unique setting, transportation context, and visitation trends; and
- Potential solutions for consideration by the Municipality and Borough of Skagway, KLGO, and other transportation partners.

Background

According to the Municipality of Skagway's website, "Skagway is historically considered the gateway to the Gold Rush of 1898. The unincorporated community of Dyea is located within the Borough." Skagway is a small town, with a population of roughly 1,000 residents. Located in southeast Alaska, Skagway's regional access for residents and business owners is via the State of Alaska Marine Highway System (ferries) and Alaska Seaplanes (both of which connect it with multiple communities and the state capital in Juneau). Alaska Route 2 links Skagway to Whitehorse, Canada, and the Alaska (or ALCAN) Highway.

Skagway is a major destination for cruise ship visitors in the Interior Passage. Because of its easy accessibility to cruise ship passengers, KLGO has the highest number of annual visitors in Alaska, with approximately 900,000 visitors per year in recent years. On a busy day, when all four of Skagway's docks have a cruise ship, over 10,000 tourists visit Skagway, which often causes pedestrian and vehicle congestion and safety issues.

¹ NPS Visitor Use Statistics for KLGO: https://irma.nps.gov/Stats/Reports/Park/KLGO. See "National Park Service Visitation Trends" section below for more detailed discussion of KLGO visitation.

Congestion Assessment Process

Part 1: Groundwork (Late Spring 2018)

Klondike Gold Rush National Historical Park staff met with various members of the National Park Service and USDOT staff to identify the Transportation Advisory Group team members and identify general transportation issues of concern to the residents, businesses, and others in Skagway.

Part 2: Field Observations and Initial Meetings in Skagway (week of July 23, 2018)

Field observations included monitoring pedestrian movements, vehicular circulation, safety, and other issues related to transportation in the peak tourism season in Skagway over four days (during two-, three-, and four-ship days). Locations included the cruise ship and ferry docks, Broadway, State Street, and Spring Street.

On July 23, 2018, Mayor Monica Carlson and Assemblyman Dan Henry met with Albert Faria, Jason Verhaeghe, and Linda MacIntyre to explore the possibility of working together on low-cost solutions to Skagway's transportation issues. The group agreed on an approach to a public workshop in September that would identify potential congestion problems and brainstorm low-cost solutions.

Part 3: Preparation for Workshop and Town Walking Tour

Members of the Transportation Advisory Group met with park staff to explore possible approaches to a public workshop, a meeting with the Mayor and Municipal staff, gathering public input, and conducting a walking tour of possible solutions to be held in September 2018. Close coordination with the Municipality helped everyone develop an agenda that could be done at a comfortable and productive pace (see agenda as Attachment A).

Part 4: Workshops, Public Input and Walking Tour in Skagway (week of September 17, 2018)

September 17: Transportation Issues with Municipality and National Historical Park

During this meeting, all attendees agreed that while there are numerous issues that needed attention, the remainder of the week should focus on three key issues: wayfinding/signage, safety, and vehicle circulation. Another area of agreement was about how much change was appropriate for the solutions (minor to moderate). The discussion concluded with general agreement that Skagway's transportation issues were important factors in the quality of life for year-round and seasonal residents.

September 18: Informal Public Input

Three non-uniformed NPS employees sought informal input from Skagway visitors and residents about their experiences related to transportation in Skagway. There was no survey, and anyone was free to refuse participation. Input was gathered at the public library, the docks and at 5th/Broadway. Overall, the participants who answered questions at the public library (morning) and at 5th/Broadway (afternoon) had overwhelmingly positive things to say about wayfinding, the ease of moving through Skagway, and safety. This was also true at the docks in the morning. However, the input from visitors during the afternoon at the docks varied dramatically. Many people voiced confusion and uncertainty about how to find their cruise ship and how to get to the docks.

September 19: Public Workshop

From 6-9 pm, the Municipality of Skagway hosted a public meeting to discuss the three key transportation issues (wayfinding, safety, and vehicle traffic management) identified on September 17. The meeting began with a short description of the impact of congestion (both positive and negative). The remainder of the meeting focused on a draft short list of potential solutions to improve wayfinding, safety and vehicle traffic management. Attendees reviewed and commented on each potential solution one by one. Attendees could also add their own solutions to the draft list on colorful sticky notes. All potential solutions were reviewed, including those added by the public during the meeting.

Participants reached consensus on multiple issues:

- Most of the draft potential solutions were appropriate for further consideration and action ("green light).
- Some solutions were appropriate for further consideration only with caution ("yellow light").
- Some solutions were out of scope or not appropriate for this effort ("red light").

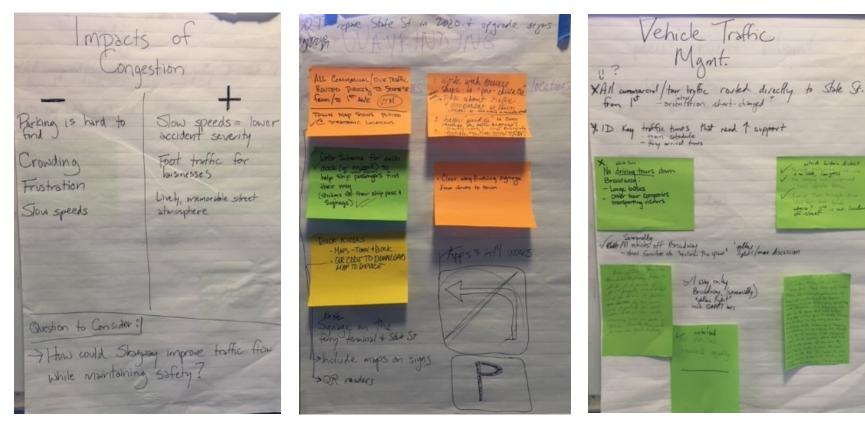


Figure 1: Notes sheets from September 19 Solutions Workshop

September 21: Walking Tour (Solutions from September 19 Workshop)

Following the workshop, the Transportation Advisory Group revised the list of potential solutions to include comments from the evening of September 18. A small group of representatives from the Municipality, tourism businesses, and the National Park Service walked around Skagway to further explore potential solutions to pilot in 2019. Areas visited included the docks and the 2nd/Broadway intersection. The tour lasted almost three hours and included a short ride in a tour bus to identify locations that provide challenges for bus circulation or safety. During the tour, local participants identified additional solutions to add to the list prior to the start of the 2019 tourist season. All of the solutions that the Municipality identified as feasible are shown in the Recommendations section.

Skagway Transportation Context

The feel of Skagway's downtown core is that of a historic mountain "main street" town. The pace and density of pedestrian activities indicate that tourists feel comfortable exploring the business and historic sites on Broadway and nearby side streets, and are not concerned about safety. Access to tourist services is plentiful and easy.

The "driver" of transportation issues is the cruise ship arrival/departure schedule. The number of ships in port varies by day from May 1- October 1 each year, with peak season generally

Figure 2: September 21 Walking Tour Participants

seeing two to four ships per day. On a "four-ship day," Skagway can receive more than 10,000 tourists, many of whom use the stop to go on a pre-packaged excursion or to visit the historic downtown area. There is the potential for increased visitation in the future, because the Municipality of Skagway is considering a proposal to expand the capacity of the cruise ship docks in Skagway to accommodate larger ships. The frequency of four or even five ship days could also increase soon if dock capacity is expanded to allow an extra ship and if the demand for Skagway travel experience continues to grow.

Numerous transportation options operate in and around Skagway, including a variety of vehicles used for tours. Skagway Municipal and Regional Transit (SMART) offers the singular public transportation option, with a bus route that covers the cruise ship docks, downtown, and the entrance to Klondike Highway and Dyea Road. Fares are \$2.00 one-way or \$5.00 for a day pass, and operating hours are from 7:00 AM until 9:00 PM between May 1 and October 1.

Visitors and residents can also choose from a range of private/commercial transportation services, including motorcoach, shuttle, taxi, rental car, bicycle rentals (including electric-assist fat-tire bicycles), scooter rentals, and motorcycle rentals. Some of these modes are available for travelers to rent and independently operate (e.g., cars, bicycles, scooters, and motorcycles), though most are combined with guided group tours.

Pedestrian Issues

The TAG team documented the following issues based on site observations and information from the Municipality and park staff:

• Pedestrian congestion on Broadway Street: on a busy cruise ship day, Skagway can have over 10,000 cruise ship visitors in town, many of whom walk through downtown Skagway – particularly on Broadway Street. On "four-ship" days, pedestrian volume often exceeds the capacity of Broadway Street's raised boardwalks, and pedestrians spill over and begin to walk in the street. Another issue is that pedestrians often walk backwards to take pictures and often do not look behind them for cars, buses or other vehicles. Essentially, this means that on busy days pedestrians have established themselves as the primary mode of transportation, and cars, buses and bicycles typically yield to pedestrians rather than the reverse.

Pedestrian crossing safety concerns:

- Much of Broadway Street is within a historic district so there are no painted crosswalks at intersections. Pedestrians often cross mid-block (rather than at an intersection) and a common sight is a car blocked by a pedestrian taking pictures in the middle of this street.
- State Street has limited pedestrian crossing infrastructure because it is a state highway. Skagway residents participating in the public workshop particularly noted safety concerns on State Street near the grocery store.

Other pedestrian safety issues:

Skagway residents drive quite slowly on Broadway during days of heavy pedestrian traffic, decreasing speeds and lowering the
potential for accidents and personal injury.

Vehicle Traffic Issues

The TAG team documented the following issues based on site observations and information from the Municipality and park staff:

• Street design issues related to tour buses: Some of Skagway's roads provide challenges for large tour buses, such as tight turning radii, which results in safety issues such as drivers going over curbs, scraping their wheels against curbs, or running into street signs. During the walkthrough on September 20, TAG participants noted several areas near the docks with black tire marks on curbs or bent signs, which indicate safety issues for tour buses.

• Tour bus circulation: During peak tourism volume days, there is a heavy volume of tour buses passing through downtown Skagway – particularly in the morning and evening as tourists leave and return to the cruise ship docks. This can result in congestion during peak times. TAG workshop participants also noted that there is currently some lack of compliance among bus drivers with the Municipality's route restrictions (such as no-left turn intersections), which may be due to ineffective signage or the need for more effective driver training at the beginning of the tourist season.

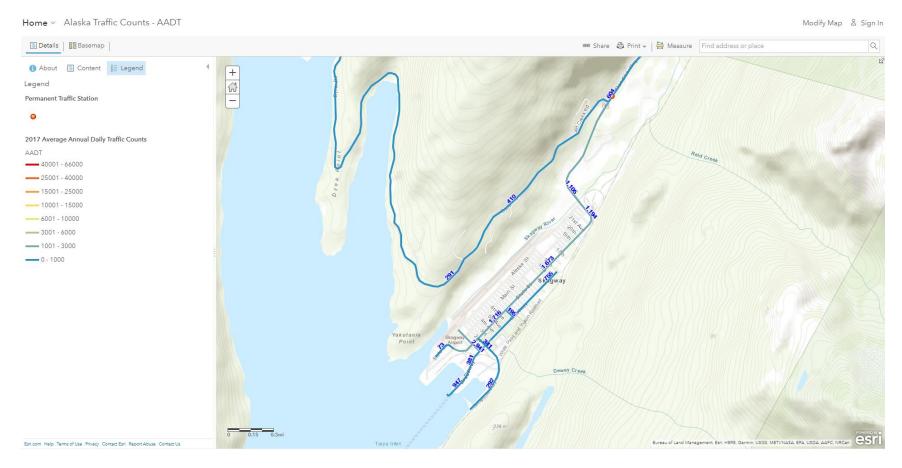
Traffic Volumes

Figure 1 below shows the 2017 Annual Average Daily Traffic (AADT) data collected by the Alaska Department of Transportation and Public Facilities (ADOT&PF). Because peak season traffic volumes are much heavier than annual average volumes, these data may not reflect the bustle of summer traffic. However, even during the summer the number of vehicles is relatively low because most visitors arrive from cruise ships and do not have vehicles. Even with local and freight traffic all the roads with counters indicate that traffic is well below industry standards for capacity. The majority of vehicles traveling on Skagway's roads are either local residents' vehicles or tour buses transporting visitors from the cruise ship docks to on-shore excursions. NPS and Skagway do not have pedestrian volume data to quantify pedestrian activity.

National Park Service Visitation Trends

Because of its accessibility to cruise ship tourism, KLGO is currently the most-visited national park in Alaska.² Annual recreational visitation was 912,351 in 2016, down somewhat from 919,661 in 2015 and 1,085,202 in 2014 (highest recorded). Visitation rose steadily from roughly 650,000 in 1997, reaching 975,000 in 2007 before dropping below 800,000 in the wake of the 2008 recession. In addition to recreational visitors, KLGO receives between 5,000 and 7,500 overnight visitors on an annual basis from tent and backcountry campers. Approximately 15% of annual visitors are independent travelers who arrive by ferry, highway, or air. This group includes Chilkoot Trail through-hikers and backcountry campers who are required to reserve permits between Memorial Day and Labor Day. Combined, cruise ship visitors and independent travelers have access to numerous recreational activities in addition to visiting the recently improved Dyea and Chilkoot Trail.

² NPS Visitor Use Statistics for KLGO: https://irma.nps.gov/Stats/Reports/Park/KLGO.



 $\textit{Figure 3: 2017 Annual Average Daily Traffic (AADT) in Skagway (Source: Alaska Department of Transportation and Public Facilities)}^{3}$

³ Alaska Department of Transportation and Public Facilities, 2017 Annual Average Daily Traffic GIS Map: http://dot.alaska.gov/stwdplng/transdata/traffic AADT map.shtml.

Potential Transportation and Related Solutions

All the solutions shown in the list below were reviewed by the Municipality and others during the week of September 17. Each solution is advisory in nature, can be customized to fit the needs of Skagway residents, businesses, partners and the Municipality.

POTENTIAL SOLUTION	DESCRIPTION
KEY ISSUE: WAYFINDING & SIGNAGE	
Modify existing directional signage to international "picture" signs	See <u>Manual on Uniform Traffic Control Devices</u>
Information kiosk at each dock	 Not on Broadway QR codes could be included Map to downtown and all docks (return to ship information is more important that how to get to downtown).
Intersection wayfinding guideposts	 One signpost with multiple (3-5) pointers to common destinations Develop consistent and clear nomenclature for maps and signs. Locate wayfinding signage, maps, and/or pavement markings (outside of the historic district only) in key locations (see sample at right) between Broadway and 2nd Avenue and the cruise ship docks, AMHS, and small boat harbor.

POTENTIAL SOLUTION	DESCRIPTION
Community ambassadors stationed at key locations like docks and 2nd/Broadway. Available during peak tourist hours, ambassadors would offer a consistent message on how to get to various destinations while improving safety for pedestrians and vehicles.	This position would require paid staff, training and safety equipment, may only be needed on 3 or 4 cruise ship days.
Social media has become an acceptable low cost way to provide information – but it requires easy Internet access.	 Could use multiple social media outlets (Facebook, YouTube, Twitter, Instagram, etc.). Note: better Internet access may be coming to Skagway within the next five years. Create a Skagway app with multiple languages Requires heavy promotion for cruise ship visitors before they travel – no on-board WiFi available on cruise ships.
Centralized text messaging	 Reserve a standard number (like *411) for common wayfinding answers.
Dynamic/Variable message signs (LED sign with adjustable content on a portable platform)	Only for RV overflow lot outside of town, not in docks or on Broadway.
Consistent SMART bus graphics/logos and colors	 Bus wraps consistent on all buses, and signs consistent with bus wrap colors/logos Consider the use of the word Downtown Loop or similar to help visitors understand how SMART works
Create color scheme (or animal or both) for each dock to help passengers find their way back	 Similar to how parking structures often work (e.g., "blue whale or brown bear lot"). Could be integrated with signs and pavement/sidewalk striping, along with map handouts. Use stickers with this theme for disembarking passengers.
Replace dock signs	 Instead of the name of the dock (which visitors won't know or understand) use a blank sign at each dock and change the name or what ship is docked there every morning).

POTENTIAL SOLUTION	DESCRIPTION
	 Include simple map on each sign Add signs for small boat harbor Refer to as "Ferry"
Add City map near railroad crossing / Town map signs at strategic locations	 Could be integrated with color/animal wayfinding guidance themes Identify which locations Avoid over-signage/confusion
Change signage at Ore Dock	 Add sign at end of dock (heading into town) to direct pedestrians to walkway. Add sign before turn into Ore Dock alerting pedestrians that the dock is around the corner.
Add signs on how to get to the cemetery.	Establish an agreed route from 2nd & Broadway to cemetery
Better signage for access to the Alaska Marine Highway System (AMHS) dock	 Clarify that cruise ships not accessible from AMHS dock. Do not use the word "ferry" to avoid confusion
Replace and relocate directional signage to prevent tour buses from causing damage at docks	 Look for signs that have been dented or where the post is off- center.
KEY I	SSUE: SAFETY
Consider "traffic calming" solutions. Traffic calming allows pedestrians and vehicles to move in the same environment with a lower risk of accident probability and severity. They are particularly useful in "main street" type environments like Broadway, and are suitable for rural communities. Possible methods could include: Chicane Traffic Circle	 See the Federal Highway Administration's <u>Traffic Calming e-Primer</u>. (Note: use of these tools on State St. would require coordination with Alaska DOT since it is designated as a state highway. Also, use of these tools in the historic district would need to be evaluated for appropriateness given the historic character.) Chicanes and Corner Extension/Bulbouts were informally tested with traffic cones on the walking tour as ways to offer a different street social experience.

POTENTIAL SOLUTION	DESCRIPTION
 Speed Humps, Cushions and Tables Raised Crosswalk/Intersection Corner Extension/"Bulbout" Choker On-Street Parking 	
Improve crosswalks at key intersections	 See Manual on Uniform Traffic Control Devices for information on painted crosswalks and related warning signs Not in historic district, and likely not on State St. Access to grocery store and library are of particular concern.
Conduct traffic enforcement by municipality-authorized staff	 Enforcement is important to the success of any crosswalks or restrictions on access or parking.
Make turning radius improvements and filling potholes/road edge ruts for tour bus routes at docks	Discussed during the walking tour, these are minor improvements designed to help tour bus traffic flow more easily and reduce safety risks.
KEY ISSUE: VEHICLE TRAFFIC MANAGEMENT	
Control access to/from roadways to improve traffic flow.	 Restrictions can be temporary based on time of day or season with cones, barricades, and trained people directing traffic and may include changes to turning movements at intersections and/or parking lots, along with set patterns for heavy vehicles. Consider using people to direct tour bus traffic for the first two weeks or so of every season to help bus drivers know where to

DESCRIPTION
go (something more than just maps), then transition to cones for the following week. Start with a joint meeting in March/April each year to outline how to approach traffic circulation, parking and other key issues for the tourist season. Include information about traffic patterns for annual tour bus driver training Traffic and other pilots would be started in May and continued through the season if appropriate. In September the Assembly, White Pass, NPS, and other key local partners would debrief the tourist season and conduct a walking tour to identify issues or minor capital changes that would be needed prior to the start of the next season. Provide bus route map for pre-season training of bus drivers indicating restricted streets and approved routes. Annual debrief in September before seasonal workers leave is key. See Attachment A: Skagway Seasonal Visitation Management Plan Template for more details.
 Discussed during walking tour: Remove grassy island and "keep out" sign and replace with pavement and striping and Remove/relocate dedication tree across from cut-off road and then cut curb and widen radium of parking lot entry Look for areas where buses don't have to back up when
and

Modify traffic circulations patterns (May 1- October 1 only) Similar to what was done in 2018 (no right turns at 2nd/Broadway). This idea would work well with special event planning and adaptive management and testing of routes with traffic cones/barricades and directing traffic by law enforcement or other trained staff. Consider multiple side street patterns to get from Spring Street to State Street.

Other Ideas that don't fit above categories:

- Pave Pullen Creek Stream Walk and direct guests to Stream Walk away from Pullen Park Road. Consider redesigning signage for the Stream Walk to communicate that it is wheelchair accessible and leads to the Railroad Dock.
- Redirect bus drop-off sites on side streets off of Broadway.

Strategic Planning Ideas (not specific solutions):

- All vehicles treated equally
- Clear wayfinding signage from docks to town
- Use adaptive management for traffic management (test, learn, adapt, test, learn, adapt) each season to adjust to differences in cruise ship sizes, arrival patterns, etc. helps avoid situations where a promising idea must be nearly perfect before it can be tried.

Suggestions Not Recommended from workshop on 9/21:

- All commercial/tour traffic routed directly to State St. from 1st
- Identify key traffic times that need additional circulation support (train schedules and ferry arrival times)
- No driving tours down Broadway (large buses, shuttles)
- Change circulation on Broadway to one-way from May 1-Oct 1, or close it to all vehicles during this time

Out of Scope Items:

• Issues affecting commercial traffic at the US/Canada border

Attachment A: Skagway Seasonal Visitation Management Plan and Evaluation Template

Note: This template is meant as an example for how the Municipality of Skagway, NPS, White Pass and Yukon Railroad, and other stakeholders could develop and record an annual Seasonal Visitation Management Plan. This plan would be developed before the summer season begins – for example in February or March – and evaluated at the end of the season but before seasonal residents have departed – most likely in September. Some sections of this plan would be filled out at the beginning of the season recording selected actions, while other sections would record notes on implementation and evaluation at the end of the season.

Season Summary Information

Year	
Plan Development Date	
Plan Evaluation Date	
Total Annual Cruise Ship Visitation	
Maximum Daily Visitation	

Plan Schedule by Month

Pre-Season (February-April) Tasks:

- Meet with stakeholders and develop Seasonal Visitation Management Plan.
- Record selected management actions for upcoming season. (See actions table below.)
- Develop training and information for relevant staff and stakeholders. (E.g., bus drivers, city ambassadors, NPS visitor center staff.)
- Implement any physical design changes prior to the beginning of the tourism season. For example:
 - Develop any permanent or temporary signage and wayfinding materials.
 - Remove existing signage that is confusing or duplicative.
 - Where appropriate, relocate or remove signage, curbs, or other infrastructure that show signs of bus conflict (e.g., signs that have been hit or curbs with black tire markings).
 - Note: some of these implementation tasks may require more long-term implementation actions, especially infrastructure changes.

May Tasks:

• Hold trainings for relevant staff and stakeholders. (E.g., bus drivers, city ambassadors, NPS visitor center staff.)

• Continue implementation of any physical design changes (see example list above).

Tourism Season (May to September) Tasks:

- Continue implementation of management actions selected in April.
- Monitor success of management actions and adjust as necessary.

End of Season / Close-Out Tasks:

- Meet with stakeholders to debrief what worked well, what didn't work well, and what changes might be needed for next year. Record the debriefing notes in the table below.
- Develop recommendations to discuss at the pre-season meeting prior to creating the next year's Seasonal Visitation Management Plan.

Sample Management Actions List

Note: add or delete rows as necessary to record selected management actions.

ACTIONS NEEDED (fill out at beginning of season)	DEBRIEFING NOTES (Fill out at end of season)
KEY ISSUE: WAYFINDING & SIGNAGE	
Sample "installed info kiosk near railroad tracks"	 Sample: "some visitors used it but others had trouble finding it, add a colorful flag to bring more attention to this information"
•	•
•	•
KEY ISSUE: SAFETY	
•	•
•	•
•	•

ACTIONS NEEDED	DEBRIEFING NOTES	
(fill out at beginning of season)	(Fill out at end of season)	
KEY ISSUE: VEHICLE TRAFFIC MANAGEMENT		
•	•	
•	•	
•	•	