# Wrangell Cooperative Association Tribal Safety Plan Update December 2018





# WRANGELL COOPERATIVE ASSOCIATION

P.O. Box 2021 • Wrangell, Alaska 99929 Telephone: (907) 874-4304 Fax: (907) 874-4305 Email: wcatribe@gmail.com



WHEREAS, the Wrangell Cooperative Association, hereafter "Tribe", is a federally recognized tribe; and

WHEREAS, the Wrangell Cooperative Association Tribal Council, hereafter "Council" is the governing body of the Tribe; and

WHEREAS, the Council recognizes that transportation safety issues and roadway infrastructure within the community of Wrangell are vital to the safety and welfare of its citizens; and

WHEREAS, there is a need in the Wrangell community to preserve and improve the overall safety of the area transportation system, while also decreasing the risk of fatalities and serious injuries resulting from incidents on or adjacent to the transportation system; and

WHEREAS, the Wrangell Cooperative Association received a Fiscal Year 2017-1018 Tribal Transportation Program Safety Funds grant to complete a Tribal Safety Plan update; and

WHEREAS, it is in the best interest of the Tribe to pursue available Fiscal Year 2019 Federal Highway Administration Tribal Transportation Program Safety Funds to address the transportation safety emphasis areas identified by community members and Wrangell Cooperative Association staff during the Wrangell Cooperative Association's 2018 Tribal Safety Plan Meeting; and

WHEREAS, eligibility for said Fiscal Year 2019 Federal Highway Administration Tribal Transportation Program Safety Funds requires that proposed projects, "...are in a current State Strategic Highway Safety Plan or tribal safety plan that is less than five years old..."; and

WHEREAS, the Council recognizes the Tribal Transportation Safety Plan as a crucial document with which to guide future Tribal Transportation Program development and the pursuit of additional funding for transportation safety and roadway infrastructure construction projects within the Wrangell area.

**NOW, THEREFORE, BE IT RESOLVED**, that the Tribal Transportation Safety Plan dated December 2018 is hereby officially adopted by the Wrangell Cooperative Association Tribal Council.

## CERTIFICATION

The Wrangell Cooperative Association adopted this resolution during a meeting held on June 5, 2019 in Wrangell, Alaska, with a quorum present.

For Against A	Abstain	Present 6	Absent 2
X John Martin, President	5	_	06.07-19 Date
X frahand On			6 - 7 - 19 Date



TRIBAL SAFETY PLAN UPDATE

## **Prepared For:**

## **Wrangell Cooperative Association**

P.O. Box 2021 Wrangell, Alaska 99929

Prepared By:



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December 2018

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## Acknowledgements

The author wishes to thank the Federal Highway Administration's Tribal Transportation Program for making these Safety Funds grants available to federally recognized tribes for transportation safety planning and the implementation of numerous transportation safety projects and activities. The author also extends appreciation to Wrangell Cooperative Association for guiding and participating in many of the activities vital to this plan's completion. Mr. William Willard's Tribal Transportation Program knowledge, input, and direction made this plan the comprehensive document that it is. Ms. Lizzy Cabot answered numerous questions, assisted with critical site visit planning, drove the author to a large volume of crash sites, and co-facilitated an extremely productive Tribal Safety Plan Meeting at the Nolan Center. During that meeting, community residents, Wrangell Cooperative Association, City of Wrangell, and Wrangell Ranger District staff members described Wrangell's transportation safety issues, shared vital crash information, and gave essential background about the community. Evergreen Elementary School staff also were extremely helpful, as Ms. Therese Pempek, Acting Principal, and Ms. Arlene Wilson, fourth grade teacher, gave generously of their time providing responses to a comprehensive set of Safe Routes to School interview questions and school demographics; while the school's two Crossing Guards, Ms. Danielle Keith and Ms. Jennifer Gerald, offered detailed pictures of the school zone arrival and dismissal safety challenges.

Without the meeting attendance, participation, and other contributions of the following Wrangell community residents and interested parties, this plan would not have been possible:

- Esther Ashton, Tribal Administrator
- William (Bill) Willard, Tribal Transportation Program Manager
- Lizzy Cabot (Romane), WCA Transportation Planner
- Chris Hatton, WCA Indian
   Environmental General Assistance
   Program (IGAP)/City of Wrangell
   EMT
- Kim Wickman, WCA IGAP
- Lester Kuntz, WCA IGAP
- Jack Churchill, WCA Tribal Council Board Member
- Lovey Brock, WCA Tribal Council Board Member
- Arthur Larsen, WCA Tribal Council Board Member

- Doug McCloskey, Police Chief, Wrangell Police Department
- Kate Thomas, Parks and Recreation Director, City of Wrangell
- Bob Dalrymple, District Ranger, Wrangell Ranger District, USFS
- Alicia Stearns, Safety Officer, Wrangell Ranger District, USFS
- Patrick Mayer, Superintendent, Wrangell Public Schools
- Therese Pempek, Acting Principal, Evergreen Elementary School
- Arlene Wilson, 1<sup>st</sup> Grade Teacher, Evergreen Elementary School
- Brian Merritt, 4<sup>th</sup> Grade Teacher,
   Evergreen Elementary School



Preparation of this Tribal Safety Plan update was funded by a Tribal Transportation Program Safety Funds grant from the Federal Highway Administration, June 2018.





56°23′06″N 132°05′11″W



Photo credit: University of Washington Libraries, Special Collections Division

Wrangell Cooperative Association (WCA) is a federallyrecognized Indian Tribe, organized pursuant to the authority of Section 16 of the Act of Congress on June 18, 1934 (48 Stat. 984) as amended by the acts of Congress, June 15, 1934 (49 Stat. 378) and May 1, 1936 (49 Stat. 1250), and duly elected to act by and behalf of its tribal members. The metropolitan or central part of the City and Borough of Wrangell (CBW) is found within the northwest corner of Wrangell Island about 155 air miles south of Juneau, 89 air miles northwest of Ketchikan, and just over 700 air miles from both Anchorage and Seattle. In the heart of the Inside Passage and part of the Alexander Archipelago within the Alaska Panhandle, Wrangell Island lies across the Zimovia Strait from the Stikine River delta, and is separated from the Alaska mainland by the Blake Channel. With an enrollment of 738 tribal members (594 of whom reside in town, and 144 of whom live out of town), WCA is located within the larger boundaries of the City and Borough of Wrangell, which has a population of approximately 2,521 people (U.S. Census Bureau, 2017).

Governed by four nations (the Tlingit nation, Russia, Britain, and the United States) over its history, Wrangell is one of Alaska's oldest non-Native communities (Bill, 2013). The Tlingit name for the community is Kaachxaana.áak'w. Naanyaa.aayí clan traditions indicate that Tlingit people slowly migrated downriver when the Stikine still flowed under the glaciers, and settled in different locations around Wrangell Island. Area petroglyphs (a word originating from the Greek for rock carving), found on numerous Southeast Alaska beaches, as well as on the beach of Petroglyph State Historic Park, attest to Tlingit occupation of the island well before the first Europeans (Wikipedia, 2018). The most ancient of these rock drawings appear to have been carved as early as 10,000 years ago (Bill, 2013).

Renowned for being the most powerful Tlingit group during the European exploration period in the late 1700s, the Stikine Tlingit's trade networks with the Tahltans of Interior Alaska extended well into Canada, up the Copper River and beyond. Also known as seasoned negotiators and fierce warriors, "they had well established communities, and a highly developed social structure equaling those found in Europe at the time" (Wrangell, 2015). These traits became

critical over time when Haida, Tsimshian, and European movement into the area brought competition for Tlingit resources.

Fur trading between Russians and area Tlingits began in 1811. In 1833, Lieutenant Dionysius Zarembo, commander of the Russian-American Company ship, Chichagof, landed at present day Wrangell. One year later, Baron Ferdinand Petrovich Von Wrangel, then head of Russian government interests in Russian America, ordered the building of a simple stockade surrounded by a solid fence of pointed logs at the location of present-day Wrangell. Named Redoubt Saint Dionysius, the siting of the stockade at the Stikine River's mouth made it a highly coveted location, since the Stikine is both a door to the Pacific and North America's fastest free-flowing navigable river (Alaskaweb.org, 2015). Despite vocally bristling at the growing threats to the traditional trade routes, relationships, and subsistence access that had supported them for generations, the Tlingits suffered the decimation of their population from smallpox epidemics in 1836, then again in 1840 (Wikipedia, 2018).

Weary of defending the isolated redoubt and unresolved conflicts with the Tlingits, the Russians leased the site to the British. Thus, on May 30, 1840, the Hudson Bay Company ship, Beaver, docked in Wrangell, and with the British flag now flying overhead, the redoubt was renamed Fort Stikine amid the significantly weakened voices of Tlingit residents. In 1849, after depleting area sea otter and beaver stocks, the Hudson Bay Company abandoned the fort, which remained under British rule until the 1867 Alaska Purchase by the United States.

In 1861, Hudson Bay Company employee, Buck Choquette discovered gold on the Stikine River, on what is now called Buck's Bar. 1868 saw the establishment of a U.S. military post called Fort Wrangel, which remained in operation until 1877. Through 1898, the community's expansion with saloons, dance and gambling halls, warehouses, hotels, grocers, and churches was due in large part to it being an outfitting post and trading center for the thousands of mining prospectors traveling to the Stikine River, Cassiar, and Klondike gold fields up the Stikine and into the Interior along the Yukon River. Some of the buildings from this time

Below: Typically associated with
Southeast Alaska salmon streams and
nearly always facing the sea, petroglyphs
are an enigmatic link to the world's
ancient inhabitants. These ancients may
have been carving images of
intermediaries (i.e., deities like "Raven"
and others) to curry favor with the
Salmon People in order to bring salmon
back to their communities annually.



Above: Legend has it that the Salmon People punished a Tlingit boy named Shin-quo-klah for wasting dried salmon. They took him under the sea, but later returned him to his people after which time he became a great shaman. His image is said to be etched on a Karta Bay rock, placed where he died after accidentally killing his own soul (which was thought to have been inhabited by a supernatural salmon at the time). The copies of his image's etching found on Wrangell and Hydaburg beaches are thought to have been carved to influence the Salmon People to provide adequate salmon runs (Bill, 2013).

period, when the population grew to over 10,000 residents, can still be seen today (Alaskaweb.org, 2015).

Like the ebb and flow of the waters onto Wrangell Island's shores, the area's two primary industries of fishing and forestry have a lengthy boom and bust history largely influenced by state and federal legislation and industry leaders' choices to exploit local resource extraction or base profit gains on regenerative methods of resource extraction that maintain the environment's natural balance. For example, commercial fishing, which at present continues to be one of Wrangell's primary industries, began in earnest with the establishment of Wrangell canneries in the late 1800s due to the abundance of area salmon, herring, halibut, crab, and shrimp. As California, Washington, and Oregon salmon runs were destroyed by careless logging and mining practices in the late 1800s/early 1900s, Alaska fisheries expanded with the advent of ice, cold storage, steamers over schooners, and the depletion of the coastal halibut stock. A cold storage plant and four canneries thrived in Wrangell as the 1920s ended (Atkinson, 1988).

Within the canneries, the salmon industry in 1905 employed 2,371 Alaska Native villagers out of a total Tlingit and Haida population of 6,000, according to the renowned Anthropologist, George Emmons (Price, 1990). However, over time, the canneries' efforts to secure their economic base by placing large fish traps at the mouth of the Stikine River and in the Zimovia Strait devastated the salmon runs as well as the regional fishing industry. In addition to appropriating their major food source, fish traps supplanted fish purchases, which had been made from Tlingit fishermen, making them a vocal group against the trap's incredible efficiency. By 1959, when the new State of Alaska officially banned traps, the Wrangell economy and Tlingit groups who had traditionally procured their subsistence resources from these streams struggled to recover.

Wrangell's 127-year timber history kicked off with the opening of Alaska's first sawmill, which shipped airplane lumber to Great Britain, and processed 1 million board feet (mbf) of timber annually (Wrangell Economic Development Committee, 2013). On February 10, 1899, after sawmill





Wrangell Harbor cannery, circa 1935.

Photo credit: Wikipedia



Above: The former Silver Bay Logging Company mill site

volume had tripled over 10 years, the Wilson & Sylvester sawmill received machinery that made it Alaska's largest sawmill (DeArmond, 2014).

The 1902 designation of the Alexander Archipelago Forest Reserve and 1907 evolution into the Tongass National Forest resulted in wood and fiber companies becoming Southeast Alaska's and Wrangell's largest employers during the mid to late 1900s (Alaskaweb.org, 2015). In fact, Wrangell's Alaska Pulp Corporation sawmill processed more than 60 mbf annually from the 1960s through 1994, when the U.S. Forest Service (USFS) terminated its 50-year contracts forcing the mill's closure. Mill closure cost a 20% loss of Wrangell's employment, a population decline of approximately 847 people, and 30% of local employment earnings (Wrangell Economic Development Committee, 2013).

Started in 1974, Silver Bay Logging (SBL) expanded into one of Alaska's largest and most efficient logging companies. Alaska's fifth largest heavy lift operator, SBL often employed helicopters to complete logging operations without the need to build roads (News, 2016). During SBL's heyday in 1998, the Alaska Pulp Corporation sawmill was purchased and reopened to house SBL's main offices and operate the facility at significantly less volume.

According to the Southeast Conference Comprehensive Economic Development Strategy for 2016 to 2020, as of last November, Southeast Alaska timber workforce earnings were \$17.3 million, representing a 96% decline in the number of board feet harvested annually from peak levels in the 1990s (Bohi, 2017). Silver Bay Logging was unable to survive, and the 6-mile mill was dismantled between 2010 and 2012.



Stikine River logging with oxen near Wrangell, circa 1897 Photo credit: Alaska Historical Society



1940 Chief Shakes House Gathering Photo credit: Wrangell Museum





Completed Shakes Island Walkway on full display Photo credit: Wrangell Cooperative Association

The Forest Service's Tongass Transition Plan to young growth (aka second growth) timber reduces, then terminates, access to old-growth timber, which has been the mainstay of industry sales. With the USFS' revised focus on recreation and restoration; plus, industry projections of a fifteen-year period during which the second growth timber will not be mature enough for harvest, the future timber industry across Southeast Alaska depends on continued timber sale negotiations with the USFS (Bohi, 2017). Presently, CBW and Wrangell Cooperative Association continue collaborations to diversify the local economy, stabilize employment opportunities, and work with the USFS to implement both the City and Borough of Wrangell's 2012 Wrangell Economic Cluster Initiative Plan and 2013 Wrangell Timber Industry Plan.

In 1902, along with the designation of the Alexander Archipelago Forest Reserve, Wrangell's post office shortened its name from Fort Wrangel to Wrangell. The city then incorporated in 1903. On May 6, 2008, Wrangell residents voted to upgrade the community from city to borough status. Previously a city in the Wrangell-Petersburg Census Area, on May 30, 2008, Wrangell became incorporated as the Unified Home Rule Borough it is today (Wrangell Cooperative Association, 2011).

Committed to the preservation of Tlingit history and the education of Wrangell youth about that history, Wrangell Cooperative Association completed bridge maintenance work on the pedestrian walkway to Shakes Island (see WCA photo at center left), as well as the historic restoration of the 1940's replica of Chief Shakes Tribal House Historic Monument - now listed on the National Register of Historic Sites (Wrangell Cooperative Association, 2013). Constructed by Civilian Conservation Corps crews in the 1930s according to traditional knowledge and methods, it stands at the original Shakes Island location of the Tlingit Indian clan house of the Naanyaa.aayí Clan inside Reliance Harbor.

Rededicated on May 4, 2013 after several years of planning, fundraising, and physical labor, the renovation represents the successful collaboration of numerous WCA partners, community volunteers, and the USFS, which donated longhouse reconstruction timber and carving materials

through the Farm Bill and \$50,000 in Secure Rural Schools Funding (Delabrue, 2013). The renovation employed the distinguished master carver, Wayne Price, trained new carvers, and revived local interest in the art of carving with the traditional adze tool (Wikipedia, 2018). Thus, the WCA built, opened, and dedicated a permanent carving shed and cultural center along Front Street in 2015 as part of the Phase II preservation process of enabling the next generation of carvers to learn and hone their craft. Phase III will bring in Southeast Alaskan master carvers to use the facility and traditional implements to refurbish or re-carve totem poles that have suffered the rigors of rainforest weather (Pilot Publishing, Inc., 2018). WCA maintains Shakes Island, Chief Shakes Tribal House Historic Monument, the Totem Park near the city center, and the Culture Center and Carving Shed (see WCA images below right).

In addition to the aforementioned cultural preservation efforts, WCA tribal members and many Wrangell residents maintain numerous Tlingit traditions; e.g., potlatches, subsistence fishing and hunting, and totem pole raising. As in most Alaska Native villages, subsistence is an indispensable part of Wrangell's culture and economy. Wrangell families count heavily on subsistence foods (e.g., deer, black bear, marine mammals and invertebrates, salmon, other finfish, waterfowl, mushrooms, and berries) to reduce their annual food budget. In Sections 802 and 803 of the Alaska National Interest Lands Conservation Act (ANILCA), subsistence is defined (in part) as "...the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation." The continuation of these uses "consistent with sound management principles, and the conservation of healthy populations of fish and wildlife" are provided for by ANILCA (United States Department of Agriculture, 2016).

The following quote from the "History" page on the Central Council of Tlingit and Haida Indian Tribes of Alaska's website details the Tlingit connections to the land and sea, "The ... Tlingit people have always lived on these sacred and wondrous lands and waters of Southeast Alaska as the original occupants and guardians. The Creator has blessed



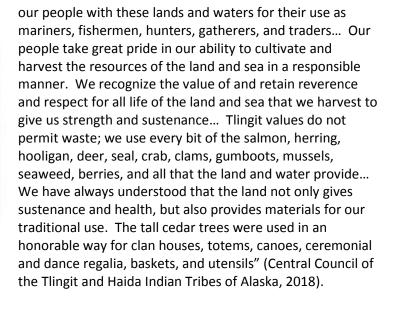


Above and below: WCA Culture Center houses local totem poles undergoing refurbishment and provides carving and Sealaska skin sewing workshops.

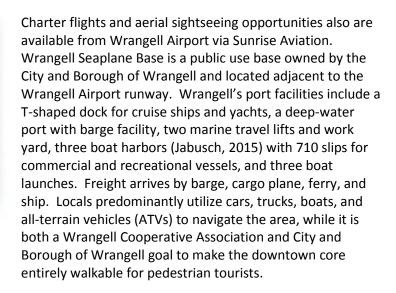




Photo credit:
Alaska Island Community Services



Present day Wrangell is accessible via the island's inland roadway system, by water via the Alaska Marine Highway System's regular mainline passenger ferry service, various cruise ship companies, and by air via the state owned and operated Wrangell Airport (see photo at left), a mile and a half from the city's central business district. Wrangell depends heavily on Alaska Airlines flights from Juneau, Ketchikan, and Seattle through this airport, which is comprised of one 5,999' by 150' asphalt runway, and had 13,160 enplanements during CY17 according to the FAA's Air Carrier Activity Information System (Wikipedia, 2018).







Wrangell Seaplane Base on April 3, 1979.

Weather that day required the use of

Visual Flight Rules.

Photo credit: Larry Williams

Found in Southeast Alaska with a land area of 201.05 square miles, Wrangell Island is the 29<sup>th</sup> largest island in the United States. The island is 30 miles long and varies from five to 14.3 miles wide (Wikipedia, 2018), while Wrangell's urban area encompasses 71 square miles, 45.3 of which are classified as (urban) land and 25.6 of which are classified as (urban) water. Per the Fiscal Year 2017 National Tribal Transportation Facility Inventory (NTTFI), the Wrangell Cooperative Association's official road inventory consists of 345.7 miles, which can be broken down as follows:

- .3 miles of tribal roads
- 5.9 miles of BIA roads
- 6.7 miles of county roads
- 8.8 miles of urban roads
- 34.7 miles of state roads and
- 289.3 miles of "Other Federal Roads,"

that are predominantly under the purview of the U.S. Forest Service (Indian Reservation Roads Program, 2017). The USFS and WCA collaborate under a maintenance agreement to perform the routine upkeep required on these Federal roadways.

Zimovia Highway, a 14-mile long two-lane roadway along Wrangell Island's west side, is a primary roadway through and out of the City and Borough of Wrangell. Zimovia (which means winter strait in Russian) is known by two other roadway names: Church Street (beginning at the intersection with Bennett Street) where the road jogs northwest), then Second Street (beginning at the McKinnon Street junction) where the road makes a slight jog northeast). Apart from the highway and the majority of the city roads, Wrangell's remaining roads are either unpaved, logging or hiking trails, or forest service roads (Wikipedia, 2018).

Wrangell's community roadway system is defined by two major traffic flow patterns of circuitous connecting streets, also known as the High Road and the Low Road. The High Road may be defined as a clockwise route beginning at the junction of Third Avenue and Airport Loop Road/Stikine Highway, circling south of Wrangell Airport to where Stikine Highway turns into Bennett Street (at Ishiyama Drive), then



Wrangell Island looks like a bird in flight on the Alaska Division of Community and Regional Affairs' Community Profile Imagery website.





Above: Zimovia Highway becomes Church Street in Wrangell





A timber sale on the Tongass National Forest. According to the World Wildlife Fund, "More than a quarter of the world's coastal temperate rain forests occur in the North Pacific coastal forests ecoregion of Southeast Alaska."

loops back with a right turn onto Church/Second Street, and heads northwest before heading north to complete the loop via Evergreen Avenue (see red loop at left). The Low Road encompasses much of Wrangell's downtown beginning at the Federal Way and Second Street intersection clockwise down Church Street southeast to Wrangell Avenue then south-southwest along Zimovia Highway, and circling back to the north-northwest with a right turn onto Case Avenue, a second right turn onto Front Street, and a final right back onto Federal Way (see blue loop at left).

Ishiyama Drive routes community members and/or tourists east-southeast from Airport Loop Road south of the golf course along pavement for approximately 1.7 miles before it becomes Spur Road. Spur Road is paved for 5.1 miles before becoming a gravel road. Pat's Creek Road heads east-northeast from Zimovia Highway about six miles south of Shoemaker Bay RV Park. While the roadway nearly bisects the island west to east, just under a half mile was left unfinished before connecting to the island's east side during the last forest service timber harvest contract.

As part of the Tongass National Forest, Wrangell is in the midst of the Pacific temperate rain forest, earth's largest, intact rain forest. Thus, a moist, cool maritime climate is prevalent across the island. Average summer temperatures range from 42 to 64°F. Moderate winter temperatures between 21 to 44°F can result from west-northwest winds being influenced by southwestern winds pushing colder air that originates in Canada from the Stikine River Valley (National Weather Service, 2018).

Annual rainfall is approximately 82.4 inches with the expectation of up to 64 inches of winter snow. While precipitation averages around 4.5 inches in June, October tends to be the wettest month of the year with rainfall

increasing to as much as 15 inches for the 31 days centered around October 17 (Weather Spark, 2018).

In addition to the incredible beauty on the island, Wrangell tourists are attracted to spring migration viewing of eagles, swans, shorebirds, and waterfowl along with the prospects of seeing brown and black bears in close proximity to the Anan Bear and Wildlife Observatory staging area. Visitors relish occasions to take walking tours of the historic sites and buildings and to spend time whale watching and studying the petroglyphs found along the beach at Petroglyph State Historic Park. Through the combined efforts of Wrangell Cooperative Association and the City and Borough of Wrangell, the community is implementing numerous economic development strategies and transportation safety initiatives recommended by the 2006 Wrangell Downtown Revitalization Plan, as well as the 2011 and 2013 WCA Long Range Transportation Plans all of which are helping the city overcome much of the adversity that followed timber and wood products industry losses.

Wrangell Public Schools (WPS) has three school locations (Evergreen Elementary School, Stikine Middle School, and Wrangell High School) with a kindergarten through twelfth grade student population of 325 students for the 2018 - 2019 school year. Recognized as a Blue Ribbon school district, Wrangell High School's curriculum includes a program that began with construction techniques and woodworking. The success of the program led to its expansion under a cooperative agreement with the University of Alaska Southeast to help high school students acquire technical skills and college credits through a full range of college prep and career technical courses.

In general, Wrangell high schoolers drive their own vehicles to school or ride the school bus with the middle school students. About 75% of the elementary school students either ride the school bus to/from school or are driven by their parents. Despite the frequent rain and low-light months of the year, Ms. Therese Pempek, the former Evergreen Elementary School (EES) Acting Principal, indicated in May 2018 that the number of walkers/cyclists remains consistent, and that 30 - 40 walkers and 13 - 20 cyclists walk and bicycle to school when the weather allows.



Beautiful Wrangell Island
Photo credit: AKDOT&PF







More attention is being paid to tribal data collection reporting relevant to Tribal Transportation Program funding expenditures, and will be reflected in subsequent Tribal Transportation Program Safety Funds (TTPSF) Notices of Funding Opportunity (NOFOs).



## Why Complete a Tribal Safety Plan?

On July 6, 2012, President Obama signed a new two-year transportation reauthorization bill into law, Moving Ahead for Progress in the 21st Century (MAP-21). Then, on December 4, 2015, President Obama signed the Fixing America's Surface Transportation Act (Public Law Number 114-94) into law, replacing the previous two-year transportation reauthorization bill, Moving Ahead for Progress in the 21st Century, with transportation funding through 2020. Per the FAST Act, \$305 billion in funding is available for highway, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act maintains the Federal Highway Administration's (FHWA's) focus on safety, keeps intact the established structure of the various highwayrelated programs they manage, continues efforts to streamline project delivery, and provides a new dedicated source of federal dollars for freight projects (FHWA, The FAST Act, 2016).

Following is a partial list of pertinent details as to how the US Department of Transportation (USDOT) and the FHWA are implementing the FAST Act:

- Tribal Transportation Program funding increased to \$475 million for fiscal year 2017 (FY17) with \$10 million per year increases to \$505 million in FY20;
- Tribal Transit Program funding is increased from \$30 million to \$35 million per year (with \$30 million for the formula component of the Tribal Transit Program and \$5 million for the discretionary competitive transit grant program under Section 5311);
- A new \$100 million per year grant program provides "...funding for the construction, reconstruction, and rehabilitation of nationally-significant projects on Federal or tribal lands" (FHWA, The FAST Act, 2016);
- The Bureau of Indian Affairs (BIA) and FHWA are working now with a 5% Project Management and Oversight "takedown" instead of the 6% they had under MAP-21;
- The Tribal Transportation Bridge Program is

- operating with a 3% takedown, which represents a 1% increase from the 2% under MAP-21;
- More attention is being paid to tribal data collection reporting relevant to Tribal Transportation Program funding expenditures, and will be reflected in subsequent Tribal Transportation Program Safety Funds (TTPSF) Notices of Funding Opportunity (NOFOs);
- To improve the collection/sharing of data regarding crashes in Indian Country, the Department of Transportation Secretary is directed to report to Congress - after consulting with tribes - about the quality of transportation safety data collected by states, counties, and tribes for transportation safety systems;
- Further, after consulting with tribes, the Secretary must give a Congressional report that identifies and evaluates options to improve safety on public roads on Indian reservations;
- The Transportation Alternatives Program (TAP), now renamed the "STP Set-aside," realized a small increase in funding over MAP-21 levels;
- Although the STP Set-aside is now a sub-program of the Surface Transportation Program, it functions just as TAP did; i.e., Safe Routes to School, bicycling, and walking projects all can compete for funding. Additionally, the MAP-21 matching requirements remain unchanged; thus, there is still some cost sharing at the state or local level;
- State and local nonprofit organizations that work on transportation safety are allowed to compete directly for TAP dollars; and finally
- While the Tribal Self-Governance Program was included in the final bill, and was a win for Indian Country, the USDOT Office of Self-Governance received an extension on the deadline to commence administration of the program. In the meantime, federally recognized tribes continue to write letters to Secretary Elaine Chao encouraging her to support the President's appointment of the next USDOT Deputy Assistant Secretary for Tribal Government Affairs, so that the program might begin in earnest.

Although the STP Set-aside will now be a subprogram of the Surface Transportation Program, it will function just as TAP did; i.e., Safe Routes to School, bicycling, and walking projects all can compete for funding.

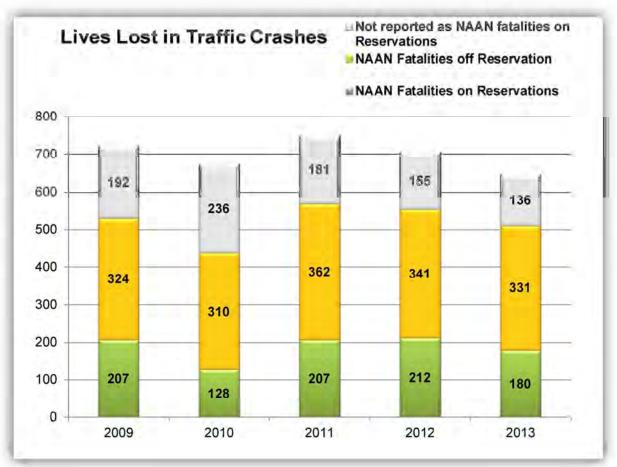


Sources: Fatality Analysis and Reporting System (FARS), NHTSA 2016 and Topologically Integrated Geographic Encoding and Referencing (TIGER), US Census 2016

"For purposes of the TTPSF, for a project to be consistent with a State's SHSP, it must be data-driven or address a priority in an applicable tribal transportation safety plan that considers the priorities and strategies addressed in the State SHSP [emphasis added]."

Within the FAST Act's Tribal Transportation Program (TTP), the annual TTP set-aside of up to 2% for Tribal Transportation Program Safety Funds (TTPSF) projects continues. According to the FY2017 - 2018 TTPSF Federal Register Notice of Funding Opportunity, "...the TTPSF will only fund highway safety improvement projects eligible under the HSIP as listed in 23 U.S.C. 148(a)(4)... Eligible projects described in section 148(a)(4) include strategies, activities, and projects on a public road that are consistent with a transportation safety plan; safety study; road safety audit; or systemic safety study and correct or improve a hazardous road location or feature, or address a highway safety problem" (Office of the Federal Register, 2017).

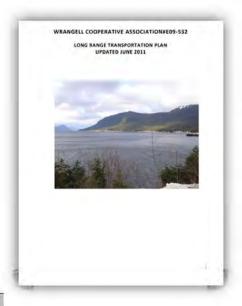
Said projects may include, but are not limited to "...development and revision of transportation safety plans, crash data improvement, road safety audits, and other activities, primarily infrastructure improvements, as listed in 23 U.S.C. 148(a)(4)" (Federal Highway Administration, 2018). For a proposed TTPSF infrastructure project to be evaluated as "highly qualified," it must meet the following criteria "...(1) Inclusion of the project or activity in a completed state SHSP or tribal transportation safety plan, or inclusion of the activity in a completed road safety audit, engineering study, impact assessment or other engineering document; (2) submission of supporting data that demonstrates the need for the project; (3) ownership of the facility, if applicable; ... (4) time elapsed since the Tribe has last received funding for a TTPSF engineering improvement



project, if applicable; [and] (5) the project is part of a comprehensive approach to safety which includes other safety efforts" (Office of the Federal Register, 2017).

Nonetheless, the pursuit of funding is only a small part of the Wrangell Cooperative Association's motivation and reasoning for completing the strategic *Tribal Safety Plan Update* herein. Quoting the *2011 Wrangell Cooperative Association Long Range Transportation Plan (LRTP)* mission statement, "It is the goal of Wrangell Cooperative Association to design, operate, plan, construct, improve, and maintain safe transportation systems for the benefit of the Tribal members and the general traveling public. We are striving to update and improve our transportation planning and work with the Tribal membership and community members to identify the highest priority needs to address with the IRR program Tribal shares we receive,

Source: What Congress Wants to Know About Tribes & Safety Data, Adam Larsen, 2016

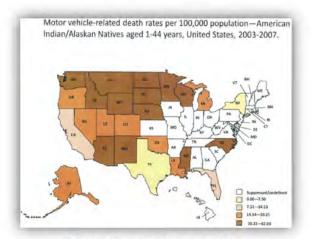


and to use that program in conjunction with other available funding sources to improve access throughout the community" (Wrangell Cooperative Association, 2011). The implication of which is that with effective Wrangell Cooperative Association transportation planning, and improved roadway safety and public access comes greater economic security for tribal members through judicious project prioritization and use of Tribal Transportation Program funding.

As the map to the left indicates, between 2003 - 2007 Alaska motor-vehicle-related deaths per 100,000 population for American Indian/Alaskan Natives aged 1 - 44 years of age numbered 14.54 - 30.21. According to the Federal Highway Administration, from 1975 - 2002, Native American and Alaska Native fatal crashes in the United States increased 53%, while fatal crashes across the U.S. in general declined 2.2%. Fatality Analysis Reporting Systems (FARS) out of the National Center for Statistics and Analysis reported that from 2007 - 2011, there were 2,752 Native American fatalities. Thus, motor vehicles are the leading cause of death for Native Americans and Alaska Natives aged 1 - 44 (BIA, 2014).

Federally recognized tribes, the FHWA, and the Bureau of Indian Affairs collaborated in 2005 to draft the *Strategic Highway Safety Plan for Indian Lands* in an effort to reduce crashes in tribal communities by providing Indian Country with direction and safety emphasis areas to address. The *Tribal Safety Management System Implementation Plan* was developed in August 2008, then updated in March 2011, to improve tribal safety and meet the emphasis areas identified in the *Strategic Highway Safety Plan for Indian Lands:* 

- Decision-making Process
- Data Collection
- Run Off the Road Crashes
- Occupant Protection/Child Restraint
- Alcohol/Drug-impaired Driving
- Other Driver Behavior and Awareness
- Drivers Under the Age of 35
- Pedestrian Safety.



Source: Bureau of Indian Affairs Indian Highway Safety Program FY2014 Highway Safety Plan

"Tribal Safety Plans are an essential component of Tribal Highway Safety Improvement Plans (HSIPs), as well as an effective planning tool for prioritizing and implementing safety solutions" (FHWA, Tribal Safety Management System Implementation Plan, 2011).

The emphasis areas outlined in Section 8 of this *Tribal Safety Plan Update* align with those identified above, and the WCA plan update was drafted in recognition of the statement made on page two of the 2011 *Tribal Safety Management System Implementation Plan,* "Tribal Safety Plans are an essential component of Tribal Highway Safety Improvement Plans (HSIPs), as well as an effective planning tool for prioritizing and implementing safety solutions" (FHWA, Tribal Safety Management System Implementation Plan, 2011).

The development of this Wrangell Cooperative Association *Tribal Safety Plan Update* was funded by a FY17-18 FHWA TTPSF grant under its "safety plans and safety planning activities" category. TTPSF project categories echo the *Strategic Highway Safety Plan for Indian Lands*' mission to, "Implement effective transportation safety programs to save lives while respecting Native American culture and tradition by fostering communication, coordination, collaboration, and cooperation" (FHWA, Strategic Highway Safety Plan for Indian Lands, 2008).

A famous quote attributed to the late Sir Winston Churchill is, "He who fails to plan is planning to fail." While this quote is commonly heard within the field of transportation planning, Janette Sadik-Kahn, former New York City Department of Transportation Commissioner reminds readers in her book *Streetfight: Handbook for an Urban Revolution*, "A century-old, fundamental traffic principle of transportation planners, is that you get what you build for" (Sadik-Kahn & Solomonow, 2016).

Although the original concept for this plan focused on transportation, public input suggested that this document will be utilized as more than just a *Tribal Safety Plan*, and will provide potential future support as a Safety Action Plan as well. Since the main goal of this Wrangell Cooperative Association *Tribal Safety Plan Update* is to improve the overall safety of the Wrangell area transportation system, while also decreasing the risk of fatalities and serious injuries resulting from incidents on or adjacent to the transportation system, the plan will indeed assist Wrangell Cooperative Association in achieving the safety results for which it builds.



The main goal of this WCA Tribal Safety
Plan is to improve the overall safety of the
Wrangell area transportation system, while
also decreasing the risk of fatalities and
serious injuries resulting from incidents on
or adjacent to the transportation system.

As articulated in its mission statement, the Wrangell Cooperative Association Tribal Transportation Program assuredly is "...people with safe and reliable access to health, education, recreation, economics, and... unlimited opportunity to have a fulfilled tribal citizenry" (Wrangell Cooperative Association Tribal Transportation Program , 2012). Harvard University's Urban Planning and Design professor, Jerold Kayden, may have most concisely summarized the critical importance of planning when he stated, "To plan is human, to implement, divine."

## **Process**

The Wrangell Cooperative Association retained M.G. Tech-Writing, LLC (MGT) to develop its 2018 Tribal Safety Plan Update. Both the FHWA Developing Safety Plans: A Manual for Local Rural Road Owners and Strategic Transportation Safety Plan Template directed plan development. This updated plan's creation employed the ongoing six-step planning process recommended by the FHWA and pictured to the right. Utilizing this planning process, WCA can remain current on data gathering and analysis, emphasis area implementation, strategy and project prioritization, and periodic evaluation of the plan's success, while also referencing this plan's proposed timeline for regular plan updates. Please note that the Tribal Transportation Program Safety Fund considers Tribal Safety Plans (TSPs) to be outdated after five years (Office of the Federal Register, 2017).

To obtain essential information for the WCA TSP, MGT spent several days touring the Wrangell area. The site visit incorporated a review of the transportation infrastructure in and around Wrangell, as well as along Zimovia Highway. Observation of morning drop-off and afternoon pick-up dynamics at and around Wrangell Public Schools, along with assessments of the school zones and neighborhoods adjacent to WPS schools also provided critical information that informed this plan's completion.

Following the FHWA's Tribal Safety Plan development guidance, while incorporating Sadik-Khan's wisdom that, "...the streets of a city contain the seeds for renewal, and it is local residents who will ultimately lead the way" (Sadik-Kahn & Solomonow, 2016), WCA sought to involve essential Wrangell safety stakeholders, human service agencies, tribal members, and Wrangell residents in this plan's update. Hence, on May 23, 2018, Wrangell Cooperative Association hosted a four-hour Tribal Safety Plan Meeting to solicit public input in the plan. Meeting attendees together agreed to adopt the vision statement developed for Wrangell Cooperative Association's 2018 Tribal Safety Plan Update: "To improve multimodal transportation safety within the Wrangell area in order to prevent serious injuries or death." Additionally, a brief distillation of information gathered from preliminary WCA Transportation Safety Survey responses was shared; existing Wrangell safety





Some of the 15 attendees to the May 23, 2018 WCA Tribal Safety Plan Meeting Photo credit: Lizzy Romane

## **Process**

partners, safety efforts, and safety problems were listed; crash data compiled by the Alaska Department of Transportation and Public Facilities (AKDOT&PF) from the years 2000 - 2015 was reviewed; and the plan's emphasis areas, goals, strategies, and implementation champions were identified. Further, using pens, meeting attendees assembled around three large Wrangell aerial maps to indicate crash locations and area trouble spots (please see Appendix pp. 110 - 111 for two fold-out scans of the maps that resulted).

In attendance were representatives from MGT, Wrangell Cooperative Association's tribal administration, Tribal Council, and staff, the City and Borough of Wrangell, Evergreen Elementary School, and the USFS' Wrangell Ranger District. The Appendix provides a meeting flyer, agenda, and sign-in sheet copy from the May 23, 2018 meeting (please see pp. 98 - 100).

As stated in the Tribal Safety Management System Implementation Plan, "Reducing highway fatalities and serious injuries with any sustained success requires that all four elements of highway safety be addressed engineering, enforcement, education, and emergency services. A Tribal Safety Program, whether large or small, should work to address the 4 E's, and its foundation, data. Data collection and analysis provide technical staff and decision makers the ability to identify and prioritize safety needs. Crash data, roadway data, and citation information will provide a basis for developing safety plans, proposing countermeasures, and developing needed education programs on tribal lands" (FHWA, Tribal Safety Management System Implementation Plan, 2011). The information, strategies, and emphasis areas detailed in this Tribal Safety Plan Update will support Wrangell Cooperative Association's efforts to continue proactive development and administration of their safety and transportation programs.

Recognizing that engineering, enforcement, education, and safety strategies, which target children and school zones will benefit a community's entire population, this *WCA Tribal Safety Plan Update* also will address Safe Routes to School (SRTS) program development. Effective SRTS

...the following Wrangell Cooperative
Association Tribal Safety Plan Update is a
comprehensive document that relies on 6
E's to "...improve multimodal
transportation safety within the Wrangell
area" as stated in the plan's overall vision.

## **Process**

program designs integrate safety, health and wellness, fitness, traffic calming, and environmental preservation into a single program. These programs increase students' daily physical activity by encouraging them to walk or bicycle to school, while simultaneously eliminating the impediments of unsafe walking and bicycling conditions. Successful SRTS programs incorporate a comprehensive "Five E" approach that includes education, encouragement, enforcement, engineering, and evaluation as detailed within the text box to the right. Obviously, three of those E's recall three of highway safety's 4 E's; yet, SRTS expands on those elements to include encouragement, and reinforces highway safety's data collection emphasis with evaluation as a driving principle. Consequently, the following Wrangell Cooperative Association Tribal Safety Plan Update is a comprehensive document that relies on 6 E's to "...improve multimodal transportation safety within the Wrangell area" as stated in the plan's overall vision.

During the process of this plan's preparation, MGT drafted the WCA Transportation Safety Survey (please see pp. 101 - 109 of the Appendix for a sample of the blank survey and the WCA Crash Data Compilation) to obtain anecdotal crash history information from Wrangell community members. Survey responses were effective in having respondents list and map spot the crashes they could remember, while also detailing some other safety problems that may not have been mentioned by the original Tribal Safety Plan Meeting attendees. Respondents also were asked to:

- identify Wrangell locations that they feel are risky, but that have not had crashes;
- detail safety improvements they felt would make the roads feel safer; and
- comment on and/or list any other areas of concern.

#### The Five "E's" of SRTS

Successful SRTS program design incorporates a comprehensive "Five E" approach that includes the following elements:

Education - Pedestrian and bicycle safety training for children and parents, and driver education targeting parents, neighbors and others in the community

**E**ncouragement - Fun, educational and motivational activities that promote walking and bicycling

Enforcement - Legal enforcement of traffic laws and activities that help change unsafe behaviors of drivers, bicyclists, and pedestrians

Engineering - Infrastructure improvements to the built environment surrounding the school that support walking and bicycling via speed reduction, review of school siting issues, and the installation of sidewalks, safer crosswalks and pathways

Evaluation - On-going information gathering to assess current conditions and / or SRTS program design and effectiveness

## **Safety Partners**









To achieve the goals within the emphasis areas of the plan, the Wrangell Cooperative Association envisions ongoing cooperation with numerous tribal, federal, state, local, and private entities; i.e., safety partners, which represent enforcement, education, engineering, and emergency medical services. Maintaining relationships with these agencies and organizations will help ensure long-term sustained efforts to improve safety in and around Wrangell, as well as across Wrangell Island.

The Tribal Safety Plan Meeting identified the following list of safety partners, which may grow over time with the resolution of area safety needs and challenges and/or the rise of new areas of concern and focus:

- Wrangell Cooperative Association Transportation Department
- Wrangell Cooperative Association Indian
   Environmental General Assistance Program
- Wrangell Emergency Management Services
- Wrangell Island Emergency Management Technicians
- Wrangell Cooperative Association
- City and Borough of Wrangell
- Wrangell Police Department
- Wrangell Public Schools
- Alaska State Troopers
- United States Forest Service
  - Wrangell Ranger District
  - Wrangell Ranger District's Safety Officers
- Wrangell Volunteer Fire Department
- SouthEast Alaska Regional Health Consortium
  - Wrangell Medical Center
  - Community Family Services Program
- Alaska Department of Health and Social Services
- Alaska Native Tribal Health Consortium
- Alaska Department of Transportation and Public Facilities (ADOT&PF)
  - Southeast Region Planning Division
  - Division of Statewide Planning
  - Alaska Marine Highway System
- Central Council of the Tlingit and Haida Indian Tribes of Alaska
- Wrangell Local Emergency Planning Committee

# Section

## **Safety Partners**

- Helping Ourselves Prevent Emergencies (HOPE)
- Sealaska Corporation
- Alaska Search and Rescue Association
- Southeast Alaska Petroleum Response Organization (SEAPRO) Hazardous Materials Training
- Wrangell Chamber of Commerce
- Wrangell Parks and Recreation
- Community Watch
- Wrangell Harbor Master
- U.S. Coast Guard
- Medevac Alaska
- AmeriCorps









Airlift Northwest Pilatus Aircraft Ltd PC-12 Turboprop on the Wrangell Airport tarmac



In addition to reviewing the Wrangell and Wrangell Island safety partners, who support WCA's *Tribal Safety Plan Update* development, and provide critical island safety services to preserve Wrangell area and island residents' well-being, WCA Tribal Safety Plan Meeting attendees listed the following existing Wrangell safety measures - categorized using the 6 E's:

#### **Education**

- Alaska Marine Safety Education Association (AANSEA) Online Cold-Water Safety Training
- USFS boating safety, aircraft safety, and deep water survival training
- Wrangell Swimming Pool and Recreation Facility
  - Seasonal swimming lessons (kids and adults)
  - Cold water rescue and survival
  - Periodic lifeguard and Water Safety Instructor trainings
  - Peer Educator Program
- Wrangell Public Safety staff provides online safety training; e.g., fire extinguisher usage, CPR and First Aid
- Assorted Alaska Island Community Services (AICS) training
- Emergency Preparedness events
- AMSEA Fishing Vessel and Drill Conductor Training
- Airlift Northwest education on medical evacuation
- Kayak Safety Day
- SEARHC Child Car Seat Safety Checks
- Wrangell Local Emergency Planning Committee
- City and Borough of Wrangell Facebook Public Service Announcements
- School bus safety, and safety assemblies and speakers with students
- Bike Safety Rodeo\*

#### **Encouragement**

- Alaska Island Community Services Health Fair, annual events and activities; e.g.,:
  - o Numerous Fun Runs/Walks; e.g.,
    - Walk/Run for Life

- SEARHC safety and health events, activities and services:
  - Community Family Services Program
    - Individualized prevention and substance abuse counseling services
  - o Men's Health and Lifestyle Balance Program
  - Wise Woman Health Care Services for Women
- Wrangell agency training collaboration
- Free courtesy Coast Guard boat inspections
- Life preserver checkout availability through the Harbormaster
- Kids Don't Float Program\*



- The passage of state and local ordinances, which punish texting and driving infractions with the same penalties as a Driving Under the Influence (DUI) charge.
- Commercial Driver's License testing at Wrangell Division of Motor Vehicles
- Ongoing DUI and speeding enforcement
- Federal Aviation Administration support services
- Coast Guard support services

#### **EMS**

- Volunteer Fire Department trains three nights a month.
- EMS instructors provide First Aid, CPR and EMT classes.
- Island-Wide Emergency Medical Services
  - Drug Screening
  - First Aid Kits
- The City and Borough of Wrangell's:
  - Addition of tsunami mitigation to its 2010
     Multi-Hazard Mitigation Plan
- Wrangell Firefighters Association fundraising for the Volunteer Fire Department, Wrangell Ambulance, and Wrangell Search and Rescue divisions
- Fairly new canine rescue program
- · Search and Rescue canine training





The Weber Street Reconstruction Project included storm drain system, curb, gutter, and sidewalk installation along with 500' of concrete paving.

- Wrangell Public Safety's online evaluation practice
- Monthly mandatory fire drills

#### **Evaluation**

- In 2011, 2013, and 2017 WCA updated its list of inventory roads per those for which the community agreed there is a future need.
- WCA Tribal Transportation Improvement Program planning process, Long Range Transportation Planning process, Tribal Safety Planning and plan update process, public participation, and project prioritization.
- Online WCA Transportation Safety Questionnaire to identify issues and procedures or projects that can be implemented to further improve transportation safety for the Wrangell community.

#### **Engineering**

- WCA and USFS collaborative agreements for the maintenance of roads, trailheads, culverts, and mile/culvert marking; USFS crushed rock supply; and directional and safety signage.
- Informal WCA and CBW collaborative agreement for roadway maintenance, transportation planning, and essential transportation projects.
- Ongoing roadway maintenance; e.g., asphalt, grading, and drainage.
- Continuous pursuit of Wrangell transportation sector improvements within all transportation segments; e.g., Shakes Island Bridge replacement or renovation, paving, and pedestrian facilities.
- WCA volunteer trail maintenance contributions;
   e.g., efforts to improve trail traction and visibility.

The Wrangell Cooperative Association completed numerous roadway improvement projects over the past several years; including, but not limited to:

- completion of the Shtax'heen Roadway Improvement Project;
- the Weber Street Road Reconstruction Project; and
- the Shakes Island Walkway Rehabilitation Project

as part of its mission to "...provide... people with safe and reliable access to health, education, recreation, economics and [the chance] to grow in their culture with unlimited opportunity to have a fulfilled tribal citizenry."

Considered a public authority under Title 25 of the Code of Federal Regulations, Part 170 (Tribal Transportation Program), the Wrangell Cooperative Association collaborates with the City and Borough of Wrangell, the United States Forest Service, and the State of Alaska Department of Transportation and Public Facilities for roadway maintenance.

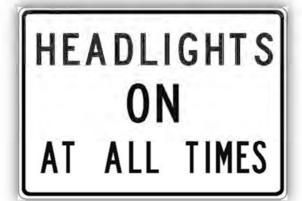
Sadly, head-on crashes take approximately 15 Alaskan lives annually, and data gathered across the United States suggests that headlights-on signing and compliance might eliminate seven (7) to fifteen (15) percent of these crashes. According to the AKDOT&PF's Headlights On At All Times in Southeast Alaska Fact Sheet, "In Southeast Alaska between 2005 and 2009 (the data period used to develop the project) there were 3 major, 6 minor, and 7 property damage-only crashes associated with such events on ten state highways" (AKDOT&PF, AKDOT&PF Southcoast Region, 2014). Thus, in the summer of 2014, AKDOT&PF installed "Headlights On At All Times" signage (see image at upper right) along Zimovia Highway from the Case Avenue intersection (MP 0.9) to the Nemo Loop Road intersection (MP 13.2), so that drivers will use daytime headlights along the route (AKDOT&PF, 2014).

Wrangell Cooperative Association is making wide ranging impacts within the Wrangell community and larger Wrangell Island area as the result of the constant and proactive attention that the WCA Tribal Transportation Program (WCAT) has paid/is paying to local and island-wide safety improvement via the completion of essential transportation plans and projects; e.g.,:

 The Long Range Transportation Plan completed in house in June 2011 analyzed WCA's existing and future transportation goals, prioritized the projects that would have the greatest community benefit, and updated the list of inventory roads for which the community feels a need looking forward



Evergreen Elementary School parking lot



twenty+ years.

- Approved on June 13, 2013, the WCA Long Range Transportation Plan Update sought to fulfill the 2011 LRTP's mission statement to "...update and improve our transportation planning and work with the Tribal membership and community members to identify the highest priority needs to address with the IRR program Tribal shares we receive, and to use that program in conjunction with other available funding sources to improve access throughout the community" (Wrangell Cooperative Association, 2011).
- The 2014 Wrangell Cooperative Association Tribal Safety Plan.
- The Wrangell Cooperative Association Tribal Safety Plan Update contained herein.

Assessment of Wrangell safety efforts would be inadequate without examining strategies that may either be partially implemented or still in the development stages. For example, since Wrangell High School currently offers no Driver's Education, WCA included "Driver's Education Program" development as an emphasis area in this *Tribal Safety Plan Update* thereby expanding upon the 2014 WCA Tribal Safety Plan's "Young Drivers" emphasis area. Even so, before the course can be offered, funding must be obtained to purchase, or appropriately accessorize, a vehicle, as well as to hire or pay for a part-time instructor.

In the planning stages since early October, a Wrangell Active Shooter Drill was held on November 8, 2018 at the AICS Clinic. The Wrangell Police Department, EMS, Volunteer Fire Department, and hospital were involved with Police Chief McCloskey and the new School Superintendent still working - as of the October 23, 2018 Borough Assembly meeting - to establish a process by which to potentially involve the schools. The drill furthers ongoing Local Emergency Planning Committee and Emergency Preparedness training goals.

Numerous WCA safety efforts are in place and operating effectively. WCA's inter-agency cooperation addresses critical safety challenges, while positively impacting Wrangell safety, health, and wellness.

Approved on June 13, 2013, the WCA Long Range Transportation Plan Update sought to fulfill the 2011 LRTP's mission statement to "...update and improve our transportation planning and work with the Tribal membership and community members to identify the highest priority needs to address with the IRR program Tribal shares we receive, and to use that program in conjunction with other available funding sources to improve access throughout the community."

## **Existing Safety Challenges**

Guided again by the 6 E's, WCA Tribal Safety Plan Meeting attendees, and WCA Transportation Safety Survey respondents, Wrangell area and Wrangell Island safety concerns were categorized as seen below. Please note that the challenges, which align with multiple categories, and repeat, are marked with an asterisk (\*).

#### **Education**

- Pedestrians lack understanding of what constitutes safe walking; e.g., avoiding distractions while walking (i.e., cell phone use); dressing for improved visibility; and how to make safe, legal roadways crossings (see top and middle photos at right).
- Evergreen Elementary School has no formal traffic flow plan or drop-off and pick-up orientation.\*
- Wrangell drivers lack formal Driver's Education.\*
- Problems with texting and driving, signaling, signage, and various driver behaviors\*
- Wrangell community members can use more seatbelt and child safety restraint training.

#### **Encouragement**

- Wrangell-area bicycle and pedestrian safety events are needed.
- Wrangell drivers lack formal Driver's Education.\*

#### **Enforcement**

- Wrangell Police Department's current radio communication system needs an upgrade to an E-911 system.
- There exist limited roadside checks for child safety restraint usage.
- "Click it or Ticket" signage is absent along area roadways.
- Wrangell lacks mobile radar speed trailers.
- Problems with texting and driving, signaling, signage, and various driver behaviors\*
- There are no "Don't Text and Drive" campaigns in place.
- Drivers failing to heed warning lights and sirens
- Personnel retention at the Police Department



Above and below: Due in part to the low volume of traffic on Wrangell roads, these Wrangell residents are jaywalking - despite the obvious availability of marked crosswalks.





## **Existing Safety Challenges**

#### **EMS**

- EMTs require more EMS and disaster training.
- EMS communication system does not work islandwide.
- EMS lacks reverse 911 capability, and has only a basic 911 system, which provides no location information.
- Privacy issues exist with lay people having scanner access, then creating additional traffic, safety challenges, and gawkers during emergency situations.

#### **Evaluation**

- Need to develop realistic, measurable, and observable safety goals, and implementation steps.
- Ongoing use of community surveys to obtain critical local safety information.
- Establish a Transportation Safety Committee, which would meet bi-annually, to review and address transportation safety related issues and assist with data reporting to the State of Alaska.
- Encourage the development of a Wrangell Coordinated Human Resources Transportation and Implementation Plan Advisory Council meetings to assess Wrangell transit needs and assist with the startup and eventual administration of the Wrangell Public Transit System.
- Employ scoring sheets to rate road quality.
- Maintain consistent safety reporting.
- Report local and island-wide crash data to the State of Alaska.
- Collaborate with the FHWA to encourage state Departments of Transportation to work more closely with tribes across the United States.
- Consider submission of a Fiscal Year 2019 Tribal Transportation Program Safety Funds grant to the FHWA to conduct a Road Safety Assessment (RSA) of Wrangell community roadways with review of:
  - Wrangell roadways with a higher incidence of traffic accidents or speeding; e.g., Zimovia Highway, Front Street, Church/Second Street, Case Avenue, Wrangell East/Spur Road, Stikine Avenue,



Much of the speeding within the Wrangell area and on its outskirts occurs along Zimovia Highway.

## **Existing Safety Challenges**

etc.;

- Wrangell intersections (e.g., the Stikine Avenue, Federal Way, and Front Street junction; Brueger and Lynch Street junction; and Church and St. Michael's Street intersection); roadway surface and lighting conditions; signage, sidewalk, and potential ladder-style crosswalk locations;
- Roadways leading into and out of the school zones; e.g., school zone demarcation (including ladder-style school crossings and potential programmable, flashing school zone sign replacement on Church Street's south side), EES' parking, pedestrian/vehicle traffic, roadway speeds, possible crossing guard locations, and other challenges that may affect student safety;
- Airport Loop Road and other Wrangell roadways for the potential installation of pedestrian and bicycle infrastructure; and
- local trails focusing on desire lines, existing trails, and possible mile marker installation to improve emergency incident response.



A 2019 Tribal Transportation Program
Safety Funds grant could provide funding
to complete a Road Safety Assessment,
which would review/improve the design
and sight lines of the Brueger Street,
Case Street, and Zimovia Highway
intersection.

#### **Engineering**

- Lack of ladder-style crosswalks in Wrangell
- No bike or walking path along Airport Loop Road from Wrangell Airport into the City
- Dilapidated school bus stops
- Limited visibility for drivers, pedestrians, and cyclists in low-light and dark conditions
- Slick and dangerous stairways in various Wrangell areas
- Ladder-style school crossings are lacking within the school zones
- Antiquated and inconsistent speed zone and jurisdictional signage
- Stikine Avenue, Federal Way, and Front Street intersection requires a formal design review
- Sidewalks along both the east and west sides of Bennett Street within the school zone have sections that are heaving and crumbling causing pedestrian trip hazards.



Despite the recommendation made in the 2006 Wrangell Downtown Revitalization Final Report that local crosswalks be replaced with those of the ladder-style configuration, Wrangell's crosswalks are still of the parallel-line variety.

# **Existing Safety Challenges**



The northwest corner of Church Street and Alaska Avenue lacks an ADA-compliant ramp.



Rock falls and slides at the Bluffs



Driver's sight line and view of student pedestrians impeded by parked vehicles at Church and St. Michael's intersection

- Additional guardrails are needed in various Wrangell locations.
- Wrangell crosswalks are only somewhat ADAcompliant (see photo at left).

The next several engineering safety challenge bullet points were drawn from responses to the following three-part question on the *WCA Transportation Safety Survey* question, "Is there a location that you feel is risky, but that you are not aware has had crashes? Yes or No. If yes, please circle location on map and describe why you think it is risky."

- "Pat's Creek (at the third corner before the lake)
  where over the years, several vehicles have slid off
  the roadway resulting in minor injuries (primarily to
  teens) and property damage."
- "The intersection of Federal Way and Second Street across from the library, where due to poor sight lines at the stop sign, there are daily close calls between vehicles."
- "At the Bluffs immediately west of Zimovia Highway between mileposts 6.5 - 8, the rock falls and slides, which are the consequence of clear cutting cause vehicle collisions with rocks and debris and/or vehicles damaged by falling stones and rocks."
- "There have been rollovers and single vehicle lane departures at the five Zimovia Highway curves between mile posts 9.5 to 11 when drivers exceed the speed limit in inclement weather."
- "Parked cars along Church Street's west side impede visibility at the intersection where Church Street turns south 90° by AICS Mental Health."
- "Cars park too close to corners (e.g., at Brueger and Lynch Street junction and at Church and St. Michael's Streets), so you can't see oncoming traffic."
- "Turning right at the top of St. Michael's Street."

In response to Question 4 on the *WCA Safety Survey*, "Are there other crash locations or accident incidents involving animals or boats not shown on the map?" one respondent commented, "The Shoemaker Park area is a speed zone that has many deer fatalities on the highway."

After WCA Tribal Safety Plan Meeting participants listed the safety challenges they observed in the Wrangell area and across Wrangell Island, they were asked to identify:

- the training needs within the "Education" category;
- specific "Enforcement" strategies that are necessary;
- "EMS" needs;
- "Engineering" and infrastructure improvements needed in Wrangell and on the island; and
- desirable "Encouragement" strategies.



TSP meeting attendees described the need for educational training as follows:

- Development of a Wrangell High School Driver's Education program
- 2. Passage of a CBW "Texting and Driving" ordinance
- 3. Training about the hazards of "Texting and Driving"
- 4. Establish "walk in" and "Scared Straight" safety trainings
- Pursue funding to reinstitute safety assemblies and pay potential safety speakers
- 6. Increase local agency coordination for the provision of additional safety trainings
- Improve community members' access to AMSEA boating safety trainings
- 8. Open USFS training curricula to others
- Create fun, volunteer youth activities/events to develop their skills/understanding of safety issues (e.g., a youth group to assist with local transportation maintenance or invite Damon Halter to provide his Blessed 2 Bless Basketball trainings to Wrangell youth)
- 10. Wrangell Public Schools' provision of an AKDOT&PFapproved <u>School Crossing Guard training program</u>.
- 11. Evergreen Elementary School development and distribution of a formal traffic flow plan and/or drop-off and pick-up orientation for parents
- 12. Parking Lot Monitor training provision to EES staff
- 13. Transportation safety education is needed for all age groups (parents, adults, kids, enforcement, and community leaders)







The Alaska Safe Routes to School Program's Reflectorsaurus.

- 14. Provide education about the dangers of texting and driving distractions - especially at Wrangell High School.
- 15. Present local enforcement and transportation safety needs to elected CBW and WCA leadership.
- 16. Install a centrally located kiosk to educate the public and tourists about potential area hazards.
- 17. Provide community members with Mothers Against Drunk Driving (MADD) program information.
- 18. Provide information as to why Safe Routes to School (SRTS) are important and how to do SRTS program development.
- 19. Provide local youth with bicycle helmet usage programs; e.g., the Helmet Your Head program.
- 20. Collaborate with EES staff and Wrangell Boy and Girl Scout clubs:
  - offer safe pedestrian sidewalk usage instruction;
  - provide an annual bike rodeo with bike safety training, as well as helmet and reflective safety vest giveaways;
  - present a workshop to parents on proper seatbelt and child safety seat usage and installation; and
  - make boating safety education more available to youth and adults.
- 21. Educate Wrangell drivers about proper daytime and nighttime headlight usage.

### **Encouragement**

Encouragement ideas suggested by WCA Tribal Safety Plan Meeting participants are summarized below:

- Encourage Wrangell High School drivers to participate in future Driver's Education classes.
- Wrangell Public Schools might consider offering an after-school program, which will provide bicycle and pedestrian safety education.
- EES also might potentially provide SRTS activities like school assemblies featuring Reflectorsaurus with SRTS reflector zipper pull giveaways, Walking School Buses, International Walk and Bike to School Day, bike trains, bike clubs, and bike rodeos.

- Issue punch cards to incentivize students walking/biking to school. Full punch cards win a prize like a healthy beverage or meal from a local restaurant.
- 5. Add WPS students' monthly mileage accrual achievements to a hallway banner similar to that, which celebrates students' reading achievements.
- Provide walking and bicycling activities on existing Wrangell area trails.
- 7. Host a WPS/Wrangell Scouts Club/SEARHCsponsored bike rodeo with helmet giveaway.
- 8. Host a monthly fun run and walk event.
- 9. Encourage the use of wearable devices to operate fitness apps.
- 10. Incorporate reflective wear giveaways into other health and wellness-related events.
- 11. Host safety checks of seatbelts and child safety seats.
- 12. SEARHC hosts Wise Women and Wise Guy contests for weight loss.
- 13. Engage Wrangell businesses to sponsor various SRTS, walking and biking events.
- 14. Encourage more sidewalk usage.
- 15. Promote an "Idle Free Zone" so that neither the WPS school buses nor parent vehicles sit idling in areas where WPS students walk or bike to school.

#### Enforcement

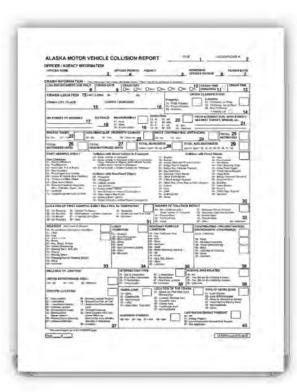
Participants in the WCA TSP meeting identified specific "Enforcement" strategies they feel are necessary to improve safety in Wrangell:

- Improve training of Wrangell Police Department staff in all facets of enforcement; including, but not limited to:
  - data management via existing crash data gathering software;
  - adherence to effective recruitment and hiring protocols;
  - o leadership;
  - Community Oriented Policing;
  - effective methods for increasing Wrangell public safety via enforcement; and









- o efficient tribal collaboration strategies.
- Increase the use of local speed traps; e.g., via the potential acquisition of a mobile radar speed trailer through an <u>AKDOT&PF Transportation Alternatives</u> <u>Program</u> - Safe Routes to School Program grant.
- 3. Increase the number of roadside checks for DUI and failure to use child safety restraints.
- Research/apply for funding to install "Click it or Ticket" signage along Wrangell-area roadways.
- Increase enforcement of safety ordinances prohibiting texting and driving\*
- Proactively implement a "Don't Text and Drive" campaign.
- Increased collaboration between Wrangell Cooperative Association and Wrangell Police Department to address Wrangell's First Responder dispatch issues
- 8. Improved crash reporting and data gathering systems; including, the institution of anonymous self-reporting regarding accidents using the <u>Alaska</u> <u>Motor Vehicle Crash Report Form 12-209</u> (see image at left).
- 9. Improvement of the government-to-government relationship/communication between Alaska Native Villages and the AKDOT&PF via advocacy for the inclusion of tribal representation on the Alaska Traffic Records Coordinating Committee, which - at present - has no tribal representatives.
- 10. Increased attention to the timely and accurate submission of crash records derived from the Alaska Motor Vehicle Collision Report Form, 12-200 to the Alaska Division of Motor Vehicles, as well as to the AKDOT&PF Division of Program Development within the Alaska Highway Safety Office.
- 11. Addressing Wrangell Island's dead radio communication spots – especially within the USFS' jurisdiction – to maintain consistent local enforcement regardless of location
- 12. WCA and Wrangell Police Department collaborate to upgrade Wrangell's 911 system to an E-911 system for improved communication capacity and decreased emergency response times.
- 13. Implement regular, but unpredictable, enforcement within Wrangell's school zones.

#### **EMS**

Meeting attendees also listed the following needs for Wrangell EMS:

- 1. Additional training for Wrangell-area EMTs
- Improved efforts to address the aforementioned First Responders' communication system challenges; e.g., use of a single communication system.
- 3. Additional equipment for Wrangell Volunteer Fire Department staff (specifically, upgraded bunker gear).
- 4. Improved data sharing between EMS, health facilities, and transportation professionals
- 5. Dispatch and staff training on new and existing communication systems
- 6. Instruct gawkers and lay people responding to emergency locations about the hazards and privacy concerns inherent in emergency scenarios.
- 7. Pursue funding that will: upgrade Wrangell to an E-911 system with location information and reverse 911 capacity, purchase additional radios, and buy/install needed repeaters that will decrease geographical communication gaps, enhance emergency communication, and decrease call response times.
- Seek funding to improve the hospital's disaster training curriculum.

#### **Evaluation**

- Using the WCA TSP Update, work with the Wrangell community to develop/implement realistic, measurable, and observable safety goals and action steps.
- Update WCA transportation plans periodically and/or as needed
- Carry on Wrangell Disaster and Emergency Services Committee meetings to develop/implement a Wrangell Small Community Emergency Response Plan.
- Continue annual emergency response scenarios to evaluate/test Wrangell's future Small Community Emergency Response Plan and assess working plan





A Wrangell Coordinated Human
Resources Transportation and
Implementation Plan Advisory Council
could potentially collaborate to
coordinate elderly transit funding and
service provision with the pursuit of
Tribal Transit Program funding for a new
public transit system.





Local bus shelters will need upgrades when a new transit system starts.

- components, and/or areas needing improvement.
- 5. Continue developing /distributing community surveys to obtain critical local safety information.
- 6. Establish a Transportation Safety Committee, which would meet bi-annually (or more often) to assess transportation safety related issues and assist with data reporting to the State of Alaska.
- 7. Create a Wrangell Coordinated Human Resources Transportation and Implementation Plan Advisory Council meetings to assess Wrangell Island transit needs and assist with the startup and eventual administration of the Wrangell Island Public Transit System.
- 8. Annually rate Wrangell-area road quality utilizing scoring sheets.
- 9. Maintain consistent safety reporting.
- 10. Report local and island-wide crash data to the State of Alaska
- 11. Collaborate with the FHWA to encourage state Departments of Transportation to work more closely with tribes across the United States.
- 12. Partner with local tow truck drivers to increase crash reporting, obtain crash photos, and incident specifics.
- 13. Collect essential data needed for annual submission of Tribal Transportation Program Safety Funds grants to the FHWA to achieve various WCA Tribal Transportation Program goals.

### **Engineering**

WCA TSP Meeting discussions of specific strategies needed to increase Wrangell safety concluded by listing critical improvements to and/or installation of new or existing infrastructure with attention to the following:

- 1. Continue the existing multiuse path along Zimovia Highway (see photo middle left).
- Renovate existing bus shelters with new roofing, paneling, and benches, as needed.
- Where it is still needed, install LED lighting with "...a color temperature of no greater than 3000 Kelvin (K)..." (Stevens, 2016) along the darkest areas of Wrangell roadways to improve drivers',

- pedestrians', and cyclists' visibility in low-light and dark conditions.
- 4. Pursue a Road Safety Assessment of community roads; including, but not limited to: intersection design, ADA compliance, surface conditions; crash, speeding, guardrail, sidewalk, and potential speed table locations; signage, school zone demarcation; and local trail markings.
- 5. Submit a Western Federal Lands Highway Division (WFLHD) *Tribal Request for Services Form* (see Appendix pp. 147 151) that includes a parcel map showing the Wrangell routes needing RSA review.
- 6. Research grants to renovate or install local and area school bus stops, as well as emergency shelters.
- Where necessary, make improvements to stairways on CBW, WPS, WCA, and USFS property to decrease trip hazards and safely accommodate wet conditions (see Mount Dewey photo at center right).
- 8. Complete a signage inventory to review contemporary speed zone and jurisdictional signage locations and/or outdated signage replacement.
- 9. Pursue funding to complete formal design reviews of existing signage placement; e.g., of Church Street locations of several S1-1 and S2-1 crossing signs.
- 10. Partner with USFS to formalize Wrangell Island trails; maintain existing trail conditions with non-skid surfaces, board installation, and weeding.
- Collaborate with AKDOT&PF to research the merging of a guardrail improvement project with a multiuse path extension project along Zimovia Highway.
- 12. Consider submission of a 2019 Tribal Transportation Program Safety Funds grant to the FHWA to complete essential WCA and CBW street improvement projects; e.g., drainage, alignment, signage, sidewalk completion with ADA-compliant ramps, guardrail installation, and road edge upgrades (e.g., rumble strips).
- 13. Continue expansion of existing WCA road maintenance efforts; including, thinning foliage for visibility and drainage.
- 14. Improve signage and roadway demarcation adjacent to Volunteer Park.
- 15. Continue work with the State's Kids Don't Float



An RSA could review placement of each of the Church Street S1-1 crossing signs to improve their visibility to drivers.





WCA and the USFS will continue collaborating to apply non-skid surfacing to Wrangell Island trails and walkways.

#### Table 7A-100. Rural School Area Traffic Control

Road Adjacent	to School Grounds	Road Not Adjacent to School Grounds
Speed Limit <35 mph	Speed Limit >40 mph	
School Area Signs (S1-1)	School Area Signs (S1-1) with a pedestrian-actuated beacon	School Area traffic control devices should not be placed on roads that do not abut school grounds unless a crossing guard is present at the site. Any exceptions to this rule shall be based on a site-specific engineering study.



Installation of a ladder-style school crossing across Bennett Street would improve student visibility and safety especially during low-light months.



Fluorescent yellow green S1-1
Advance School Warning and
School Crossing Sign
Photo credit: 2009 Manual of
Uniform Traffic Control Devices

- Program and other funding sources to purchase additional floatation devices for checkout by the public and for Wrangell dock installation.
- 16. Commence membership recruitment for the Wrangell Island Coordinated Human Resources Transportation and Implementation Plan Advisory Council to address Wrangell and island transit needs, complete an area Transit Feasibility Study, and assist with startup of the Wrangell Island Public Transit System.
- 17. Participate in/host joint community meetings on the potential for Western Federal Lands Highway projects.
- 18. Collaborate with AKDOT&PF to research/pursue potential funding for: a Zimovia Highway crosswalk at the Rainbow Falls access point, parking lot installation as a highway and playground barrier, and improved demarcation and signage; e.g. Rectangular Rapid Flash Beacons.
- 19. Consult Part 7, "Traffic Control for School Areas," of the AKDOT&PF's Alaska Traffic Manual Supplement to the 2009 Edition of the MUTCD for guidelines on Alaska school zone demarcation to improve WPS' school zone safety (see Appendix p. 152 for an excerpt); e.g.,
  - replace the existing WPS' S2-1 school crossing signs with the newer fluorescent yellow green S1-1 school crossing signs per the 2009 MUTCD prescription; and
  - install ladder-style school crossings across: Church Street to connect the sidewalks along its east and west sides; First Avenue to provide a safe school crossing across a secondary street; and from Bennett Street's northern sidewalk to its southern sidewalk, then into the EES campus.

This Wrangell Cooperative Association data summary is a compilation of data gathered from the Alaska Department of Transportation and Public Facilities, the Wrangell Cooperative Association Transportation Safety Survey, Wrangell Police Department, and the Office of Boating Safety out of Alaska's Department of Natural Resources. The crash information distilled from the WCA Transportation Safety Survey represents incidents from as early as 1976 through early 2018; while the crash data obtained from AKDOT&PF includes incident records reported across Wrangell Island from 2000 through 2015 by the agencies listed below:

- Alaska Department of Transportation and Public Facilities
- Alaska State Troopers
- Alaska Wildlife Troopers
- Wrangell Police Department
- Fish and Wildlife Protection
- Forest Service Law Enforcement and Investigations
- Individual Participants.

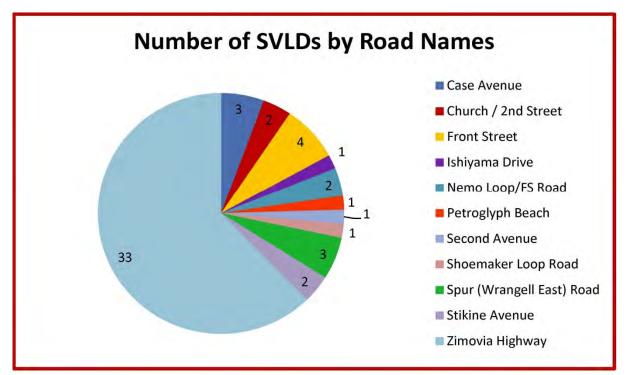
As one reviews the crash data within this Data Summary section, it is important to note that the incident reports span a large time period. Thus, the reader will wish to consider that there may have been significant changes and/or improvements on Wrangell roadways during this lengthy crash history.

#### **Crash Severity**

From 1976 - 2018, there were 295 total crashes in and around Wrangell. Nonetheless, because much of the crash data acquired was anecdotal or incomplete, ten crashes routinely are dropped from the data analyses within this "Data Summary" section, as it is impossible to classify them by accident severity. Where it is useful to review the "Unknown" data fields, the information has been analyzed and presented herein. Therefore, the detail within the table to the right includes the "Unknown" data field for the year, but not the ten crashes for which the accident severity was "Unknown." Three of the 295 total crashes involved a fatality and seven crashes resulted in serious injuries.

Year	Fatal	Serious Injury	Minor Injury	Property Damage Only	Total
1976				1	1
1998	1				1
2000		1	1	10	12
2001				4	4
2002				1	1
2003				5	5
2004			1	5	6
2005			3		3
2006			3	2	5
2007		1	3	5	9
2008			2	5	7
2009		1	2	6	9
2010			3	2	5
2011				4	4
2012		2	2	9	13
2013			3	2	5
2014			1	2	3
2015		1	4	38	43
2016			4	46	50
2017			3	57	60
2018	4	1	1	34	40
UNK	1			1	2
Grand Total	6	7	36	239	288

Number of Crashes by Year, Wrangell, Alaska, 1976 - 2018



Above pie chart sources: AKDOT&PF, Wrangell Police Department, and the Wrangell Cooperative Association Transportation Safety Survey

Number of Vehicles Involved in Wrangell Accidents			
# of Vehicles	Fatal & Serious Injury	All Severity	
1	13	177	
2		103	
3		4	
TOTAL	13	284	

### **Crash Locations**

Please see Appendix pp. 103 - 109 for the WCA Crash Data Compilation developed from the Wrangell Cooperative Association Transportation Safety Survey. The eight pages of Wrangell aerial maps (Appendix pp. 110 - 117) attached to that compilation offer a visual look at where area crashes occurred, as well as describing some troublesome roadway sections. In addition, the "Location of All Severity Crashes 1976 - 2018" table at the top of the next page informs the location synopsis below.

In brief, of the 295 total crashes, 170 occurred on "Unknown" roadways (one fatality, two serious injuries, and 167 minor injury/property damage only [PDO]). Zimovia Highway had two fatalities and two serious injury accidents and 43 minor injury/PDO accidents, while Front Street had no fatal or serious injury accidents, but fifteen minor injury/PDO accidents. Church/Second Street, Wrangell Avenue, and Spur/Wrangell East Road each had one serious injury accident. Church/Second Street also had eight minor injury/PDO accidents while Spur/Wrangell East Road has

Locatio	Location of All Severity Crashes 1976 - 2018			
Road Name	Fatal & Serious Injury	Minor Injury	Property Damage Only	Grand Total
Airport Road		1		1
Ash Street		1		1
Bennett Street		1	2	3
Berger Street			1	1
Case Avenue		1	9	10
Church Street/2nd Street	1	1	7	9
Evergreen Avenue		2	1	3
Federal Way			3	3
Front Street		3	12	15
Grief Street			1	1
Ishiyama Drive		1	1	2
Nemo Loop/Forest Service Road			2	2
Outer Drive			2	2
Petroglyph Beach			1	1
Pine Street			1	1
Reid Street			2	2
Second Avenue		1		1
Shoemaker Loop Road			1	1
Spur Road/Wrangell East Road	1	2		3
St. Michael's Street			1	1
Stikine Avenue			4	4
Unknown	3	6	161	170
Wrangell Avenue	1			1
Zimovia Highway	7	16	27	47
Grand Total	13	36	239	288

had two minor injury and no PDO accidents. Case Avenue had ten minor injury/PDO accidents, but no reported fatalities or serious injury accidents. Bennett Street, Evergreen Street, and Ishiyama Drive each have experienced minor injury/PDO accidents, but have had no reports of either serious injury accidents or fatalities. Airport Loop Road, Ash Street, and Second Avenue each have had minor injury accidents, but no other accident types. As regards Wrangell roadways experiencing PDO accidents only, Federal Way had three; Reid Street, Outer Drive, and Nemo Loop each had two. Berger, Grief, Pine, and St. Michael's streets along with Petroglyph Beach and Shoemaker Loop Road each had one PDO accident respectively.

The following crash location information was gleaned from the *Wrangell Cooperative Association Crash Data Compilation* (on pp. 103 - 109 of the Appendix) that was developed from the *Wrangell Cooperative Association Transportation Safety Survey* (see Appendix pp. 101 - 102).

Safe	ty Surve	y Crash I	Locatio	ns Repo	orted
Year	North	South	East	West	TOTAL
1976		1			1
1998		1			1
2005	1		1		2
2012		1			1
2015	1	1			2
2016		5	1		6
2017	1	2	1	1	5
2018	1	6			7
UNK	2	1		1	4
TOTAL	6	15	3	2	26

The above crash data originated exclusively from the WCA
Transportation Safety Survey.



Zimovia Highway at a long reverse curve just before the 7-mile mark



Difficult sight lines exist at the Bennett Street, Wrangell Avenue, and Zimovia Highway intersection.



The junction of Second Street, Stikine
Avenue/Evergreen Street, and the
ferry dock egress

All 26 of the crashes reported on the survey gave locations. Both the crash data distillation and WCA TSP Meeting attendees' aerial map review indicate that there tend to be more incidents of nearly every type in the south section of Wrangell (see the "Safety Survey Crash Locations Reported" table on the previous page). The most likely reasons for the predominance of collisions in the community's southern area have to do with the higher posted speed limits on Zimovia Highway, its reverse and compound curves, and a road edge at the Bluffs that is hazardous due to falling rock.

Further, there have been four PDO crashes at the intersection of Case Avenue and Ash Street; one of which resulted from the southbound driver on Case failing to yield when turning left onto Ash; and three of which occurred when southbound Case drivers passed through the Ash Street intersection. One crash was attributed to following too closely, but the other two crashes were classified as having "no improper driving." Therefore, the signage, sight lines, and slight jogs made by both roadways at this intersection may require scrutiny.

The Case Avenue, Berger Street, and Zimovia Highway junction has been the scene of four minor injuries that are the consequences of drivers' failure to yield. WCA TSP Meeting attendees also suggested the north section of Shoemaker Loop Road is dangerous, because of a consistent lack of ice and snow removal during the winter months, which - when exacerbated by the poor sight lines down Zimovia - also makes safe exits onto the highway at Shoemaker's slightly inclined north and south egresses risky.

Although the WCA Transportation Safety Survey lists less than half as many incidents in north Wrangell, the junction of Stikine Avenue, Federal Way, and Front Street as well as the Stikine Avenue and Second Street intersection each have had more than one crash. In central Wrangell, the difficult line of sight and roadway alignment at the Bennett Street, Wrangell Avenue, and Zimovia Highway intersection have contributed to minor and incapacitating injury crashes.

Despite the fact that injuries are not occurring as a result of improper backing or crashes with parked vehicles, 44

crashes with parked vehicles are noted within the data set, an indication that design review is needed of the many community parking lots and structures - particularly for their narrow configurations and driveway egresses. Some of the parking lot conflicts might be eliminated with "No Parking," "Employee Parking Only," and "Truck Parking Only" signage and zones along with the stenciling of ideal traffic flow patterns in paved lots. Additionally, the signed designation of separate ingresses and egresses in lots with narrow or unsafe entrances or exits also could decrease vehicle conflicts. Reducing Wrangell parking lot crashes will require close collaboration between CBW business owners and the Wrangell Police Department, so that enforcement can occur after the installation of appropriate parking restriction signage.

The WCA TSP Meeting aerial map review provided information about numerous Zimovia Highway "hot spots" (e.g., with roadway alignment crossing Pat's Creek, at the Bluffs, between mileposts 6.5 and 8.0, and between mileposts 9.5 and 11) in addition to particulars about existing pedestrian safety challenges when trying to cross the highway to access the Rainbow Falls Trail (see aerial map on Appendix page 111). Other causal factors in Wrangell crashes include drivers' propensity for speed along local roadways, and their disregard for yield signage when merging. The knowledge obtained from this data may allow for proactive planning of strategies targeted to the above areas.

The crash data includes two bicycle crashes. On November, 2, 2007, a 12-year old male cycling northwest on Wrangell Avenue sustained serious injury after failing to yield at the stop sign and hitting a passenger car traveling south on Church/Second Street. A second bicycle crash occurred in 2016 at an unknown location when a cyclist of indeterminate age hit a 58-year old female driver in her passenger car resulting in property damage.

Wrangell crash statistics also list two pedestrian crashes. The first minor injury crash with a pedestrian transpired in the evening on Christmas Day 2000, the consequence of pedestrian error or confusion on the part of the 76-year old pedestrian and improper backing on the truck driver's part.



On November, 2, 2007, a 12-year old male cycling northwest on Wrangell Avenue sustained serious injury after failing to yield at the stop sign and hitting a passenger car traveling south on Church/Second Street.

The second crash happened mid-afternoon on September 24, 2009, and resulted in the serious injury of both a 36-year old woman and a 52-year old male when a 16-year old driver made a right turn from Wrangell Avenue onto Church/Second Street, and was cited for "Failure to exercise due care."

In reply to the Safe Routes to School Pre-Site Visit Interview question, "What are your concerns regarding student safety with respect to traffic?" Former Evergreen Elementary School Principal, Therese Pempek, replied, "Making sure the Crossing Guard gets in place on time." As evidenced by these four crashes, and information shared by both Ms. Therese Pempek, the former Evergreen Elementary School Acting Principal, and Ms. Arlene Wilson, EES' fourth grade teacher, pedestrian and bicycle safety education and enforcement are ongoing needs for area residents and drivers - with special focus needed on education for parents and students utilizing Wrangell school zones. In fact, annual education, encouragement, and enforcement strategies focusing on bicycle and pedestrian safety could help prevent any additional pedestrian or potential bicycle incidents from happening in Wrangell.

#### **Crash Type**

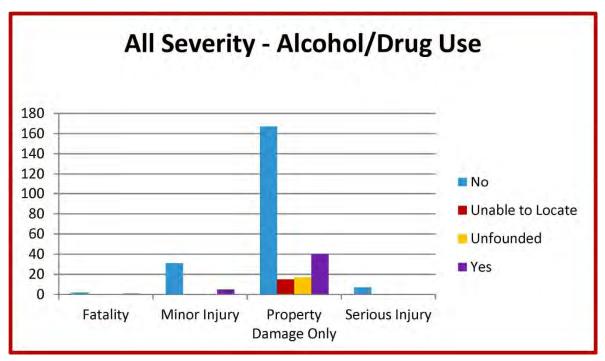
Please note that the following conclusions about crash types were from the *Wrangell Cooperative Association Transportation Safety Survey* and crash data obtained from both the Wrangell Police Department and AKDOT&PF.

- "Single Vehicle Lane Departures" represent 33% of the total number of Wrangell accidents;
- Centerline crossing contributed to at least five Single Vehicle Lane Departures (SVLDs);
- 44% of the accidents involved light trucks, 39% involved passenger cars, and eight percent involved all terrain vehicles (ATVs); and
- Nearly 85% of the accidents were PDO.

#### Single Vehicle Lane Departures

"Single Vehicle Lane Departures" are defined as "...crashes that involve only one vehicle leaving its lane and resulting in a collision." This crash type then can be broken down further into the following crash event types:

- Cross Median/Centerline (single vehicle only)\*
- Parked Vehicle



- Bridge/Overpass
- Culvert
- Curb/Wall
- Ditch\*
- Embankment
- Guardrail (end)
- Guardrail (face)
- Bridge Rail
- Other Fixed Object\*
- Overturn/Rollover\*
- Ran Off Road\*
- Sign
- Snow Berm
- Tree\*
- Utility Pole

In the above bar graph: "Unfounded" means that the reported person was stopped, contacted by police, and found not to be intoxicated.

\*Indicates fatal and/or serious injury crashes of this event

### **Alcohol/Drug Impairment**

type in and around Wrangell.

The "Alcohol Related/Driving While Intoxicated" citation totals provide the best look at the volume of Wrangell drivers who are either alcohol or drug impaired. Of 62 total citations recorded, 40 (or 65%) were for Driving While

"Single Vehicle Lane Departures" represent 33% of the total number of Wrangell accidents...



The DWI citation numbers suggest that Wrangell enforcement and local education agencies partnered with the mental health wing of Alaska Island Community Services (and/or other appropriate Wrangell organizations) could "communicate, coordinate, and collaborate" to decrease the number of local drivers getting behind the wheel while under the influence.

Intoxicated (DWI) - one with assault. A DWI citation was issued for one of the three fatalities, for five of the minor injuries, and for 32 of the property damage only crashes.

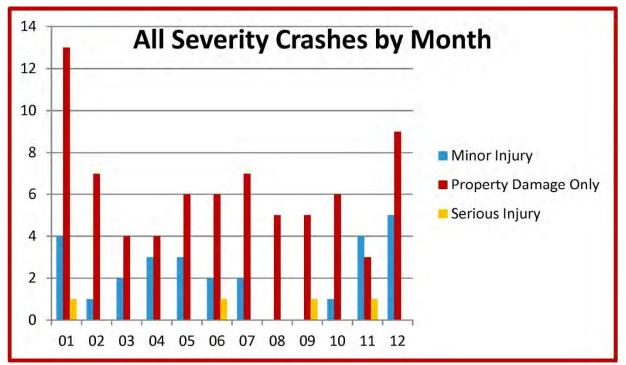
The number of "Unfounded" and "Unable to Locate" DWI reports suggests that community members need to receive training in what truly constitutes a "Driving While Intoxicated" incident. Nonetheless, it is likely better that drivers who appear to be driving erratically are stopped and investigated than left to potentially create unsafe driving conditions.

#### **Safety Equipment Used**

Of the 40 Wrangell crashes for which safety equipment usage was described, only twelve were incidents during which safety equipment (e.g., a lap belt or lap and shoulder harness) were *not* used. Six of those crashes involved minor injuries and six were property damage only.

#### **Distillation of the Above Crash Data Suggests:**

- Excessive speed was a factor in two of the three fatalities. Driving while intoxicated also influenced the Crash 2 fatality during which a male 20-year old's car hit a guardrail at the Bluffs on Zimovia Highway back in 1998. The combination of speed, a lack of driving skill, and road conditions were causal factors in the Crash 24 fatality of a male teenager struck by a vehicle while riding his dirt bike over a hillcrest on an unmarked dirt road off Zimovia Highway at the 11 or 12-mile marker.
- Seven "Fail to exercise due care" citations were distributed for one of the serious injury and six of the minor injury/PDO incidents.
- Four "Failure to yield right of way after stop or to pedestrian" citations were issued for four minor injury/PDO crashes.
- Six drivers were cited either for "Improper backing" or "Speed too fast for conditions" when charged with causing six minor injury/property damage only crashes.
- The bulk of Wrangell area accidents are occurring in south Wrangell (along Zimovia Highway's curves, at

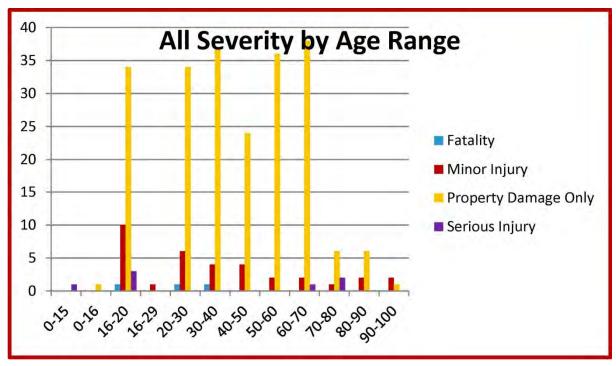


The bar graph above details crashes between 1976 - 2018 by month (Note the three fatalities within the data set are not incorporated into the graph, because the months of their occurrences are "Unknown." Sources: AKDOT&PF, Wrangell Police Department, and the Wrangell Cooperative Association Transportation Safety Survey

the Bluffs, at the Zimovia Highway and Case Avenue intersection, and at the junction of Wrangell Avenue and Zimovia Highway).

- Surprisingly, road surface conditions contributed to only 23% of all accident types with winter weather conditions influencing serious injury, but not fatality crashes.
- Wrangell road character data indicates 32 of the 75 crashes, for which road character was recorded, occurred in curves. Eleven took place at a curve with grade; three happened in curves on a hillcrest; and 18 transpired at level curves.
- Serious injury crashes take place predominantly in January, June, September, and November, while December has the highest number of minor injury crashes, and January and December experience the highest number of PDO crashes.

Wrangell road character data indicates 32 of the 75 crashes for which road character was recorded occurred in curves. Eleven took place at a curve with grade; three happened in curves on a hillcrest; and 18 transpired at level curves.



The bar graph above details 1976 - 2018 Wrangell crashes by the age of the driver. Sources: AKDOT&PF, Wrangell Police Department, and the Wrangell Cooperative Association Transportation Safety Survey

Data Analysis Outcome - American Indian Trauma in Alaska:

- Accident victims with severe traumas from accidents require air evacuations to hospitals in Juneau and/or Anchorage.
- Higher trauma rates occur in rural areas for Alaska Native populations.
- As aforementioned, motor vehicle traffic related trauma is the highest cause of injury.

Through the aerial map review, Wrangell Cooperative Association Tribal Safety Plan Meeting attendees pointed out the Wrangell roadways along which drivers tend to speed. The following page lists the locations where future enforcement efforts could be directed and/or a mobile radar speed trailer placed (after acquisition through a Fiscal Year 2018 Transportation Alternatives Program grant for Safe Routes to School).

Within Wrangell, the data set and WCA TSP Meeting

attendees indicates that most of the speeding occurs along:

- Case Avenue
- Church/Second Street
- Spur/Wrangell East Road; and
- Zimovia Highway.

Regarding Wrangell ATV incidents, for which the vehicle type was reported, four crashes occurred in 2015, and three crashes in 2016 and 2017 respectively. Although these crashes represent about three percent of the total number of Wrangell crashes, the data suggests there is a need for local ATV riders to receive safety training.

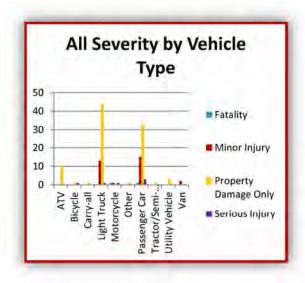
Please see Appendix pp. 118 - 144 for the *Wrangell, Alaska Road Safety Data Analysis 1976 - 2018 Crash Data* .pdf file distilled from the aforementioned crash data sets.

### **Boating Accidents**

While specific Wrangell Island boating accident statistics are not detailed within this section, it is well understood that Alaska has one of the highest boating fatality rates in the nation. Between 2001 - 2011, 105 more Alaskans died in recreational boating accidents than died in commercial fishing. Further, nine of ten of those who died were adult males and nine of ten were in boats 26 feet in length or shorter (Coast Guard News, 2011). Additional Alaska boating fatality statistics indicate:

- nine of ten 10 were not wearing a life jacket, or were never found;
- five of six followed a capsize, swamping, ejection, or fall overboard, into Alaska's frigid water; and
- three of four involved powerboats (Alaska Department of Natural Resources, Office of Boating Safety, 2014).

The preceding Data Summary suggests attention to the eight Emphasis Areas listed below as well as to "Intersection Configuration/Design" and "Alcohol or Substance Abuse." Proactive work to address those two emphasis areas and those within the next section will help Wrangell target specific crash areas and causes for correction/improvement.



Regarding the ATV incidents, for which the vehicle type was reported, four crashes occurred in 2015, and three crashes in 2016 and 2017 respectively. Although these crashes represent about three percent of the total number of Wrangell crashes, the data suggests there is a need for local ATV riders to receive safety training.

The emphasis areas selected for this *Wrangell Cooperative Association Tribal Safety Plan Update* originated from comprehensive review of the crash data obtained; the consensus of WCA TSP Meeting attendees and survey respondents; discussions with Mr. William Willard, WCA Tribal Transportation Program Manager, and Ms. Lizzy Romane, WCA Transportation Planner; and MGT's May site visit. Those emphasis areas are:

The Wrangell Cooperative Association
Tribal Safety Plan Update's vision
statement is: "To improve multimodal
transportation safety within the Wrangell
area in order to prevent serious injuries or
death."

- 1. Emergency Management Services
- 2. Small-Scale Roadway/Trails Improvement Projects
- 3. Large-Scale Roadway/Trails Improvement Projects
- 4. Safe Routes to School
- 5. Marine and Watercraft Safety Awareness
- 6. Driver's Education Program
- 7. Transportation Safety Management
- 8. Road Safety Assessment.

It is anticipated that if critical effort is focused on these eight safety concerns (along with the two on the preceding page) in both the short and long-term, the overall safety of the Wrangell-area transportation system will improve, while the risk of fatalities and serious injuries resulting from incidents on or adjacent to the transportation system will decrease. Thus, this plan's main goal and vision statement will be achieved.

The table below classifies each emphasis area by the respective "E's" with which it can be identified.

Emphasis Areas Categorized by the 6 E's					
Education	Encouragement	Enforcement	Engineering	EMS	Evaluation
EMS		EMS		EMS	EMS
		Sm. Roadway Improvements	Sm. Roadway Improvements		Sm. Roadway Improvements
	Lg. Roadway Improvements		Lg. Roadway Improvements		Lg. Roadway Improvements
SRTS	SRTS	SRTS	SRTS		SRTS
Driver's Ed	Driver's Ed	Driver's Ed			Driver's Ed
Marine Watercraft Safety	Marine Watercraft Safety	Marine Watercraft Safety	Marine Watercraft Safety		Marine Watercraft Safety
Trans Safety	Trans Safety	Trans Safety	Trans Safety	Trans Safety	Trans Safety
Management	Management	Management	Management	Management	Management
RSA		RSA	RSA	RSA	RSA

Each of the above emphasis areas is described in detail below with a specific goal. Additionally, specific strategies and/or activities, along with the naming of a champion, or team of champions, assigned to lead goal and strategy implementation is displayed in table format for easy review.

During the May 2018 Tribal Safety Plan Meeting, there was no ranking given to the emphasis areas that were discussed. Thus, Emergency Management Services will be addressed first.

Question 5 on the Wrangell Cooperative Association Transportation Safety Survey asked respondents, "Which of the following are transportation safety concerns to you?" Questions 6 and 7, "What would make the roads feel safer to you?" and "Other areas of safety concern or comments," as well as Question 5, solicited responses indicating that the emphasis areas of Small-Scale Roadway/Trails Improvement Projects (e.g., school crossings, crosswalks, bike lanes, signage, parking lots, and trails) and Large-Scale Roadway/Trails Improvement Projects (e.g., sidewalks, intersection configuration/design, and bridge projects) were high priority methods for addressing local safety challenges. Thus, discussion of these types of roadway projects will follow Emergency Management Services as emphasis areas two and three respectively. Information about the Safe Routes to School, Marine and Watercraft Safety Awareness, Driver's Education Program, Transportation Safety Management, and Road Safety Assessment emphasis areas then will close out Section 8.

#### **Emergency Management Services**

The "Existing Safety Efforts," "Existing Safety Challenges," and "What's Needed?" sections of this plan on pages 24 - 25, 29, and 36 offer a comprehensive look at Wrangell EMS and search and rescue successes and topics of concern. Thus, the focus of this Emphasis Area will be on the strategies proposed to address the most critical of those issues.

The consultant is unaware of any Wrangell EMS or Volunteer Fire Department, Police Department, or Alaska State Trooper data or reports that objectively analyze the Second only to "Talking on phone or texting while driving," "Lack of pedestrian or bike infrastructure," "Pedestrian visibility and reflectivity," and "Pedestrian or bicycle safety" were the most frequently checked boxes in answer to Question 5 of the Wrangell Cooperative Association Transportation Safety Survey: "Which of the following are transportation safety concerns to you?"

"As far back as 1967, President Lyndon Johnson's Commission on Law Enforcement noted that, 'in emergency situations that require mutual support, neighboring police departments cannot communicate because their radios operate on different frequencies' (Sasso, 2015)." number or types of adverse impacts that phone and radio communication system dead spots (and other difficulties or failures) are creating for Wrangell-area EMS or search and rescue services as they strive to respond promptly to local emergency situations. Nevertheless, it was apparent from the amount of time spent and frustration expressed during the WCA Tribal Safety Plan Meeting discussion of this topic that it is a very serious issue on which Wrangell's Emergency Management System and search and rescue agencies need to collaborate to address effectively and affordably. Thus, the goal established for this emphasis area is to reduce First Responders' response times to emergency locations and situations.

Emergency Mana	agement Services
Strategy	Champion(s) or Lead Department
	Recommended
Additional training for Wrangell EMTs and	WCA, Wrangell EMS, WVFD, EMTs, Southeast
Wrangell Volunteer Fire Department (WVFD)	Region EMS Council, Inc., Alaska Fire Standards
staff; e.g., disaster response training.	Council & SEARHC
Wrangell EMS implements a single	Wrangell EMS, WVFD, Wrangell Police
communication system.	Department (Wrangell PD) & WCA
Dispatch and staff training on new and existing communication systems.	Wrangell EMS, WVFD, Wrangell PD & WCA
Additional equipment for WVFD staff; e.g.,	Wrangell EMS, WVFD, WCA & CBW
updated bunker gear and emergency satellite	
loaner phones.	
Improve data sharing between Wrangell EMS,	Wrangell EMS, WVFD, Wrangell PD, WCA, CBW,
Wrangell health facilities, and transportation	SEARHC, Coast Guard & Harbormaster
professionals.	
Develop a formal Wrangell Fire Department	WVFD, WCA, CBW, Alaska Fire Standards
	Council & FEMA
Career Day presentations at WPS by WVFD staff	WVFD, WPS & Alaska Crossings
PSA reminders (radio, press releases & social	Wrangell EMS, WVFD, Wrangell PD, WCA, CBW,
media) about heeding sirens/warning lights,	Alaska State Troopers & USFS Law Enforcement
maintaining safe space around emergency	
locations for First Responders to do their jobs	
without public interference/on looking.	
Conduct a Community Risk Assessment to	Wrangell EMS, WVFD, Wrangell PD, WCA, CBW,
prepare for grant pursuit.	Alaska State Troopers & USFS Law Enforcement
Seek grants & other funding to implement	Wrangell EMS, WVFD, Wrangell PD, WCA, CBW,
above strategies.	Alaska State Troopers & USFS Law Enforcement
	(See WCA FAST Act and Other Opportunities
	table on Appendix pp. 159 - 170.)

#### **Small-Scale Roadway/Trails Improvement Projects**

The goal identified for this emphasis area is to prioritize and install critical lower-cost infrastructure. Both the goal and its implementation strategies were agreed upon by the CBW, WCA, and USFS staff that attended the WCA Tribal Safety Plan Meeting. AKDOT&PF suggests this consensus on roads project priorities be established for inclusion in the State of Alaska's State Transportation Improvement Program (STIP), Public Forest Service Roads Program, and the Bureau of Indian Affairs Roads Program.

Although a five-year Maintenance Agreement exists between the WCA and USFS, WCA may wish to collaborate with the City and Borough of Wrangell to develop a more formal Maintenance Agreement with both a Maintenance Schedule and funding stream to complete low-cost maintenance and improvements of signage, parking lots, asphalt, grading, brush, drainage, and trails.

During the May site visit, Wrangell Cooperative Association Transportation (WCAT) staff pointed out numerous low-cost roadway maintenance needs; including, a review of areas where signage, narrow and/or crumbling roadway shoulders, unsafe parking behavior, road dust, animal corridors, and tourist traffic created safety challenges. For example, the photo above of the west side corner of Ishiyama Drive at Bennett Street depicts how Wrangell roadway edges and corners can begin to crumble under the influence of a combination 82.4" of annual rainfall and vehicle traffic.

In addition, the continued WCA-USFS Maintenance Agreement will ensure the collaborative future installation of boards, asphalt, and potential LED lighting along Wrangell-area trails under this Small-Scale Roadway/Trails Improvement Projects emphasis area.

Since much of Wrangell is built on a series of hills and inclines, there are numerous stairways fabricated of diverse materials to help pedestrians navigate the area. Each of these stairway areas suffer in different ways from moisture exposure, erosion, or wear due to foot traffic, and require ongoing maintenance.



The goal identified for this emphasis area is to prioritize and install critical lowercost infrastructure. Please note that the future classification of a WCA roadway or trails improvement project as either "small-scale" or "large-scale" may be determined by the project scope (including, but not limited to: distance, cost, or number of infrastructure line items to be installed). For example, the replacement or upgrade of a single sign or LED light might be a small-scale project (depending on that sign's installation price), while the installation of that same sign or LED light across the entire Wrangell community likely would be a large-scale project.

Thus, both the following "Small-Scale" and "Large-Scale" Roadway/Trails Improvement Project emphasis areas repeat certain suggested project types.

"Daylighting" can boost safety along
Church Street and Front Street (between
Outer Drive and Lynch) as well as at the
Brueger and Lynch, Church and St.
Michael's junctions. "To "daylight" an
intersection is to clear sight lines between
pedestrian crossings and oncoming cars,
usually by creating no-parking zones at
the curbs in front of crosswalks at that
intersection.

#### Guidance

- Install "No-parking" signs to mark the existence/length of no-parking zones
- Daylight at least 20' (about one parking space) from the crosswalk at an intersection's near and far sides with 20 30 mph speed limits
- Daylight at least 50' (about two parking spaces) in advance of crosswalks at each intersection approach on streets with 35 45 mph speed limits
- Daylight at least 30' in advance of each stop or yield sign
- Prohibit drivers from standing or parking vehicles at curbs within 20' of crosswalks at intersections or within 30' of any stop or yield sign
- Evaluate impacts of daylighting by collecting crash data" (America Walks, 2012).

Comments under Question 3 of the WCA Safety Survey read, "...there are near misses daily with drivers backing into the Federal Way through lane of traffic from the headin parking at the post office." Then, in response to Questions 6 and 7, "What would make the roads feel safer to you?" and "Other areas of safety concern or comments" on the Wrangell Cooperative Association Transportation Safety Survey, the following remarks were noted:

"The rights of way are in terrible shape (e.g., First Avenue south of Evergreen Elementary is filled with huge potholes + Stikine/Evergreen Avenue from the Alaska Marine Highway Ferry Terminal to the airport also is in terrible condition)."

"Increased signage and formalized crossings at trails, etc."

"Consistent snow removal," "More sanding on roads," and "Unsafe, unmaintained roads/sidewalks" were the maintenance-related comments listed on the survey.

Within the Engineering segment of the "What's Needed?" portion of this plan was the suggestion that a Wrangell-area signage inventory be conducted to list outdated signage for replacement and review existing speed zone, school zone, and jurisdictional signage locations.

Quoting Section 4 "Transportation Planning" within the 2011 Wrangell Cooperative Association Long Range Transportation Plan, "The strategy of the Tribe is to work with the various public authorities, identify common priorities, and then work together to secure funding for their identified priority projects." Said public authorities, then are listed as Wrangell Cooperative Association, the City and Borough of Wrangell, the State of Alaska, and the United States Forest Service.

Other critical Small-Scale Roadway/Trails Improvement Projects, which have been proposed include, but are not limited to:

- The previously cited trails maintenance projects (e.g., to the Mount Dewey Trail);
- Shoring up Wrangell roadway edges and corners;
- Consider funding pursuit for the design/installation

- of a Front Street and Church/Second Street Road Diet project with lane markings and bike lanes;
- Consider funding pursuit for the design/installation of <u>back-in angle parking</u> to increase pedestrian and driver safety and formally delineate parking spaces along at least one side of the USPS parking lot;
- Upon Alaska Department of Environmental Conservation clearance, complete the parking lot next to the existing carving shed;
- Collaborate with CBW, local business owners, and WPS to inventory and prioritize those parking lots with the highest number of crashes for ingress/egress and signage improvements;
- Fund/complete a Wrangell, Alaska Business Tourism Plan and Feasibility Study;
- Fund/install interpretive signage per the future Wrangell, Alaska Business Tourism Plan and Feasibility Study;
- Periodic gravelling, weed whacking, and ditch clean up along Wrangell roads within the WCA IRR inventory; and
- Continuous attention to small local projects like those WCA historically has completed to roads, trailheads, culverts, mile/culvert marking, asphalt, grading, and drainage.



While it can some adjustment, back-in angle parking provides clear sight lines when vehicles pull out; removes difficulties with backing into moving traffic; provides easier and safer access to exit, enter, load and unload vehicles; helps adults ease kids in/out of car seats; and may increase available parking stalls in a lot.

SMALL-SCALE ROADWAY/TRAILS IMPROVEMENT PROJECTS		
Strategy	Champion(s) or Lead Department Recommended	
Prioritize school zones and SRTS development to drive the prioritized project list.	WCA, WPS, CBW & AKDOT&PF	
Maintenance and improvements to stairways, trails, trailheads, and access points.	WCA, CBW, USFS, AKDOT&PF & FHWA	
Drafting and passage of a Complete Streets ordinance.	WCA, CBW & WPS	
Continuous attention to the need for periodic road maintenance projects; e.g., grading, gravelling, brush, road edges, and drainage.	WCA, CBW, USFS, AKDOT&PF & FHWA	
Collaborative development of Rainbow Falls Access (Shoemaker Park): (1) Pursue FLAP grant implementation; and (2) Research additional funding to support Rainbow Falls access improvements; e.g., potential Rectangular Rapid Flash Beacon installation.	WCA, CBW, USFS, AKDOT&PF & FHWA	

SMALL-SCALE ROADWAY/TRAILS IMPROVEMENT PROJECTS			
Strategy	Champion(s) or Lead Department Recommended		
Continue WCA and collaborative funding pursuits to increase the local roadway maintenance budget and provide additional funds for Wrangell road projects.	WCA, CBW, USFS, AKDOT&PF & FHWA		
Recognize/celebrate the success of the annual and five-year USFS-WCA Maintenance Agreements.	WCA, CBW & USFS		



Above: Rapid Rectangular Flash Beacons (RRFBs) are pedestrian activated, have two alternating yellow LED lights which strobe up to 60 times per second, and provide motorist yield rates of up to 80%.

### **Large-Scale Roadway/Trails Improvement Projects**

Pedestrian safety, community-wide lighting upgrade, programmable signage, multiuse path and guardrail, and roadway and bridge projects were listed for inclusion in this Wrangell Cooperative Association Tribal Safety Plan Update. This plan presents those project recommendations through the lens of the overarching heading Large-Scale Roadway/Trails Improvement Projects as a means of tying them together, as well as into WCA's short and long-term goals for Wrangell-area roadway safety. Therefore, the goal identified for this emphasis area is for WCA to complete large-scale infrastructure projects within existing and future Wrangell Cooperative Association transportation plans in a timely fashion.

The information in this section originated in part from the "Transportation Planning" goals listed in Section 4 of both the 2011 Wrangell Cooperative Association Long Range Transportation Plan and 2013 Wrangell Cooperative Association Long Range Transportation Plan Update; input obtained at the WCA Tribal Safety Plan Meeting; and safety concerns the general public shared via the WCA Transportation Safety Survey.

Quoting Section 4 of the 2011 Wrangell Cooperative Association Long Range Transportation Plan, "The Tribe has identified the following activities and projects as vital to its transportation needs:

- Bradfield Road (Wrangell to Continental Highway System in British Columbia, Canada)+
- Improvements along the Stikine River Corridor up to

the Canadian Border+

- a. Docks and boat landings
- b. Trails
- c. Recreational areas and camping
- Road Maintenance and Emergency Repairs of road [sic] approved in our IRR inventory
  - a. Equipment (roller and grader)
- Trail Maintenance of trails approved in our IRR inventory
- Replacement or rehabilitation of Shakes Island Bridge...
- Safety Enhancements including but not limited to:
  - a. Street Lighting
  - b. Signage
  - c. Guard Rail
  - d. Drainage Problems
  - e. Dust Control...
- ...Paving and *Pedestrian facilities* where feasible for:
  - a. First Avenue (Head Start Access)
  - b. Second Ave (District Office Access)
  - c. Reid St (hospital access) Route 4019
- Cow Alley Pavement, including right-of-way corrections Route 4030+
- Handicap accessible Transit Van
- Expanded Ferry Service+
- Marine Landing Facility (Joint project with Petersburg)+
- Pedestrian Facilities
- Area wide Street Lighting
- Interpretive signage to enhance tourism
- <u>Scenic Byways Program</u> (Wrangell Cooperative Association, 2011)."

Section 4, "Transportation Planning," from the June 2013 Wrangell Cooperative Association Long Range Transportation Plan Update states "WCAT is in the process of developing/expanding their DOT... WCAT would like to purchase/rent/lease more construction equipment such as rollers and graders and will need a secure place to store them. The yard would have a gravel pad, equipment storage facility and fence...

...Wrangell Cooperative Association would like to have a cultural tourism plan in place. One of WCA's future goals



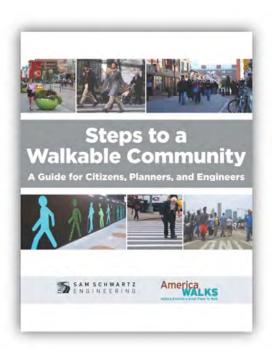
82.4" of annual rain in conjunction with local hills, eroded curbing and driveways leads to further drainage challenges, degraded roadways, and roadway edges.



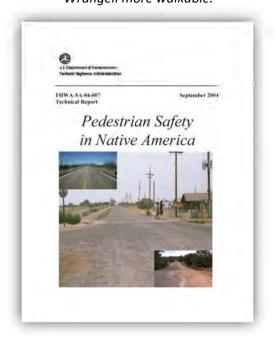
First Avenue paving (plus sidewalk, curb, and gutter installation) will reduce EES, Medical Center, and Head Start driveway vehicle ingress/egress conflicts, and improve EES students' parking lot safety.



Paving Second Avenue will improve drainage and pedestrian safety.



Given Wrangell Cooperative
Association's long-standing goal to
improve "pedestrian facilities," the
guidebooks pictured above and
below can assist WCA as it seeks to
install safe, pedestrian-support
infrastructure that will make
Wrangell more walkable.



would be to purchase their own tour bus(es)/van(s). The tourism plan would include walking and potential bus, bicycle and boat tours to cultural and historic sites including (but not limited to):

- Chief Shakes Tribal House\*
- Totem Park\*
- Petroglyph Beach
- Carving Shed\*
- Anan Wildlife Observatory
- Chief Shakes Grave Site
- Old Town.

Pedestrian Facilities for a Walkable Community (listed in no order of priority and not limited to):

- Benches
- Paths\*
- Pull outs
- Educational Kiosks
- Cultural Maps
- Trash Cans
- Cultural Signage
- Visual elements" (Wrangell Cooperative Association, 2013).
- +Denotes projects with which there are nearly insurmountable challenges to their completion.
- \*Denotes projects that have been partially completed since the 2011 and 2013 LRTPs were finalized.

Please note that some of the transportation projects listed within the 2011 LRTP and its 2013 update are not incorporated above, either because they already have been completed or because planning for their completion was covered under the preceding Small-Scale Roadway/Trails Improvement Projects emphasis area. Please also note that the 2011 LRTP and its 2013 update mention "street lighting" twice and "pedestrian facilities" three times.

Bearing in mind that 33% of Wrangell accidents involve "Single Vehicle Lane Departures," and 57% of Wrangell crashes occur in curves, it makes sense for many future WCA Large-Scale Roadway/Trails Improvement Projects to

focus on local area roadway issues like those in the subsequent list:

- guardrails
- sight lines
- switchbacks
- steep embankments
- extremely curvilinear designs
- antiquated signage (see photo at right)
- delineator, no-passing zone and milepost marker placement, and
- narrow shoulders.

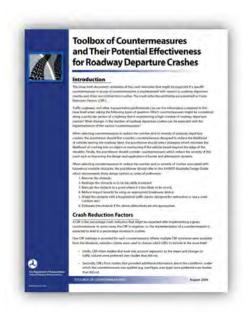
Several of the suggested strategies for Large-Scale Roadway/Trails Improvement Projects are driven by the need to decrease the potential for the previously-cited crash types, and address the above roadway dynamics. WCA and local stakeholders also may wish to consult the FHWA's <u>Toolbox of Countermeasures and their Potential Effectiveness for Roadway Departure Crashes</u> for additional ideology about potential infrastructure fixes that can improve roadway characteristics, which contribute to these crashes.

#### **Sidewalks**

"Sidewalks" are included as a sub-heading under this Large-Scale Roadway/Trails Improvement Projects emphasis area, because of the high priority they have relevant to pedestrians', students', and tourists' safety in Wrangell. For example, WCA Tribal Safety Plan Meeting attendees suggested the completion of the Zimovia Highway multiuse path for pedestrians' and cyclists' use and ability to travel further outside the CBW boundaries along a route that is safely detached from the existing highway infrastructure.

"No bike or walking path along Airport Loop Road from Wrangell Airport into the City" and "Sidewalks along both the east and west sides of Bennett Street within the school zone have sections that are heaving and crumbling causing pedestrian trip hazards" were "Existing Safety Challenges" comments recorded from meeting attendees. In addition, numerous WCA Transportation Safety Survey respondents checked both "Lack of pedestrian or bike infrastructure"

During the Wrangell Cooperative
Association's May Tribal Safety Plan
Meeting, the recommendation was made
that WCA and AKDOT&PF collaborate to
research the merging of a Zimovia
Highway guardrail improvement and
multiuse path extension project.



"Every \$1.00 spent on bicycling and walking trails results in a savings of \$3.00 in health care costs."

-- American Heart Association



One of the best ways for a community to evaluate its success at creating an ADA-compliant environment for people with disabilities is to invite a wheelchairbound individual to assist with a rolling tour of local facilities. Through this collaborative infrastructure review, WCAT and CBW staff can better identify which areas require prioritization for upgrades and enhancements to ensure equal access for everyone.

and "Pedestrian or bicycle safety" under Question 5 of the *Safety Sur*vey, "Which of the following are transportation safety concerns to you?"

Many sidewalk upgrades were completed based on the 2006 Wrangell Downtown Revitalization Plan. However, many of the area's sidewalks are antiquated in that they are extremely narrow or lack modern ADA-compliance features - like truncated domes and/or ADA wheelchair ramps. Several residential communities lack any kind of pedestrian infrastructure (which is why the passage of a Complete Streets ordinance will guarantee that future development includes curbs, gutters, and sidewalks).

Item 12 on the "Engineering" list within the "What's Needed?" section of this plan proposes that the Wrangell Cooperative Association, "Consider submission of a 2019 Tribal Transportation Program Safety Funds grant to the FHWA to complete essential WCA and CBW street improvement projects; e.g., drainage, alignment, signage, sidewalk completion with ADA-compliant ramps [emphasis added], guardrail installation, and road edge upgrades (e.g., rumble strips)."

SIDEWALK PROJECTS			
Strategy	Champion(s) or Lead Department		
	Recommended		
Continue WCA and collaborative funding	WCA, CBW, WPS, AKDOT&PF & FHWA		
pursuits to increase the total linear feet of			
Wrangell sidewalk infrastructure.			
Review Wrangell neighborhoods and	WCA, CBW, WPS, AKDOT&PF & FHWA		
roadways for potential sidewalk installation.			
RSA of Wrangell roads to determine/prioritize	WCA, CBW, FHWA & RSA Team		
sidewalk installation locations.			

#### Signage

Signage was mentioned repeatedly throughout the process of this *Tribal Safety Plan Update's* development. When Tribal Safety Plan Meeting attendees were listing Section 5's Existing Safety Challenges, "Problems with texting and driving, signaling, *signage*, and various driver behaviors" came up under the "Education" *and* "Enforcement" categories. The fact that the City and Borough of Wrangell

is missing "Click it or Ticket" signage also was listed under the "Enforcement" category when meeting attendees were reviewing "Existing Safety Challenges."

The first of three bullet points under the final "Evaluation" recommendation in Section 5 states, "Consider submission of a 2019 Tribal Transportation Program Safety Funds grant to the FHWA to conduct a Road Safety Assessment of Wrangell community roadways with review of... roadways leading in to and out of the school zone; e.g., signage/markings..."

References to signage also occur in the "Engineering" portion of Sections 5 and 6 respectively: "Antiquated and inconsistent speed zone and jurisdictional signage" and "Pursue funding to complete formal design reviews of existing signage placement; e.g., of the locations of several of the Church Street S1-1 crossing signs."

The fourth "Engineering" recommendation in Section 6 of this *Tribal Safety Plan Update* suggested that Wrangell Cooperative Association "Pursue a Road Safety Assessment of community roads; including, but not limited to: intersection design... signage, school zone demarcation; and local trail markings." The eighth recommendation was to, "Complete a signage inventory to review contemporary speed zone and jurisdictional signage locations and/or outdated signage replacement."

In answer to Question 6 on the Wrangell Cooperative Association Transportation Safety Survey, "What would make the roads feel safer to you?" one respondent advised "Increased signage and formalized crossings at trails, etc." Another survey respondent checked "Missing or inadequate road signage" in response to Question 5 on the survey, "Which of the following are transportation safety concerns to you?"

With the above comments and suggestions in mind, the goal for the Signage sub-heading is to update Wrangell-area signage along roadways and trails, and increase local awareness of roadway signage.



Mounting two of the signs pictured below 20' feet north and 20' south of the school crossing will increase student safety and visibility.





Drivers' visibility may increase with vehicles parked 20+ feet back (or one parking space) from where the parking restriction ends.



SIGNAGE PROJECTS		
Strategy	Champion(s) or Lead Department Recommended	
Consider submission of a 2019 TTPSF grant to conduct a Road Safety Assessment with review of signage needs and placement (with particular attention to Church/Second Street's S1-1 and S2-1 sign placement, signage along the Bennett Street school zone, and at the Rainbow Falls trailhead access on Zimovia Highway).	WCA, CBW, WPS, AKDOT&PF, FHWA & RSA Team	
Develop a Wrangell-area signage map using GIS and photos of existing signage.	WCA, CBW, WPS, AKDOT&PF & RSA Team	
Apply WCA maintenance funding to signage review/installation.	WCA, CBW, WPS, AKDOT&PF & RSA Team	
Seek additional funding for signage replacement.	WCA, CBW, WPS, AKDOT&PF & FHWA	

### **Bridge Projects**

Back in 2011, the Wrangell Cooperative Association Long Range Transportation Plan included "Replacement or rehabilitation of Shakes Island Bridge...." on the list of Section 4 "Transportation Planning" projects. Thus, the goal for this sub-heading is to obtain additional funding for bridge projects, and/or to apply existing funds to critical bridge improvements when they become available.

BRIDGE PROJECTS		
Strategy	Champion(s) or Lead Department Recommended	
Research/obtain funding for preliminary engineering and design of Shakes Island Bridge project.	WCA, CBW & FHWA	
Obtain appropriate rights of way, if needed, for Shakes Island Bridge project.	WCA, CBW & FHWA	
Install fish ladders, fish weirs, geofabric and/or culverts, if needed.	WCA, CBW & Alaska Fish and Game	
Pursue Army Corps of Engineers' permit if bridge project will impact wetlands.	WCA, CBW, USACE & Alaska Fish and Game	

### **LED Lighting Projects**

WCAT staff described Wrangell's existing lighting

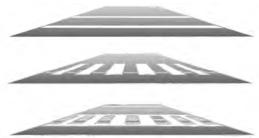
infrastructure as "outdated." Therefore, the goal set for this Large-Scale Roadway/Trails Improvement Projects subheading is to "Install LED lighting with '...a color temperature of no greater than 3000 Kelvin (K)...' along the darkest areas of Wrangell roadways to improve drivers', pedestrians', and cyclists' visibility in low-light and dark conditions" as stated in the page 37 list of "Engineering" recommendations. Said lighting should be approved for use by the 2009 MUTCD and/or the Alaska Traffic Manual Supplement to the 2009 Edition of the MUTCD. Per the CNN article, Doctors issue warning about LED streetlights, as well as the American Medical Association article, AMA Adopts Community Guidance to Reduce the Harmful Human and Environmental Effects of High Intensity Street Lighting, it is critical for the health of local Wrangell residents and Wrangell Island species thriving in dark environments that WCA and CBW install LED lights having the lowest emission of blue light possible.

Once Wrangell Cooperative Association has developed and prioritized a project list, consideration might be given to the submission of an LED roadway lighting proposal for the 2019 Tribal Transportation Program Safety Funds grant round.

Since one of the strategies identified for the Large-Scale Roadway/Trails Improvement Projects emphasis area is "Implement existing transportation surveys and plans," WCA, CBW, and appropriate stakeholders will wish to begin with a review of the projects listed within the 2011 Wrangell Cooperative Association Long Range Transportation Plan and 2013 Wrangell Cooperative Association Long Range Transportation Plan Update, as well as within the 2006 Wrangell Downtown Revitalization Plan and 2009 Wrangell Multi-Hazard Mitigation Plan, which also have transportation safety-related goals and implications.

LED LIGHTING PROJECTS	
Strategy	Champion(s) or Lead Department Recommended
Wrangell Cooperative Association and the City and Borough of Wrangell collaborate to research/seek grants to purchase LED lighting with a color temperature of no greater than 3000 Kelvin.	WCA, CBW & FHWA
Continue Wrangell Cooperative Association and the City and Borough of Wrangell coordination to replace existing roadway lighting with LED lighting either via FY19 TTPSF grant or other grant funds.	WCA, CBW & FHWA
Wrangell Cooperative Association can submit a Western Federal Lands Highway Division (WFLHD) Request for Services Form and parcel map for a Wrangell Road Safety Assessment to review potential new roadway lighting locations.	WCA, CBW, WFLHD & RSA Team









#### Crosswalks

The vision statement for the 2006 Wrangell Downtown Revitalization Plan was "creating a livable, healthy downtown supported by and consistent with the community's vision, values, and identity." Page 11 of the plan begins with "Pedestrian Circulation: "Improve existing sidewalks, add new sidewalks, crosswalks [emphasis added] and paths...," then crosswalk suggestions and diagrams are provided throughout much of the document (see the City Pier to McKinnon "Analysis of Segments and Recommendations" diagram from the Revitalization Plan at left). The installation of 30 separate ladder-style (also known as continental markings) crosswalks is depicted across the six downtown segments for which analyses and recommendation diagrams were presented in the plan. However, where new Wrangell crosswalks were installed, those crosswalks were of the parallel-line configuration not the ladder-style type.

"Crosswalk markings provide guidance for pedestrians crossing roadways by defining the appropriate paths for them. While basic crosswalk markings consist of two transverse lines, an FHWA study found that continental markings were detected at about twice the distance upstream as the transverse markings during daytime conditions. In the study, this increased distance meant that drivers traveling at 30 miles per hour (mph) had eight additional seconds of awareness of crossing pedestrians (America Walks, 2012)." The two photos at the bottom left illustrate the stark differences in visibility between parallel (or transverse)-line crosswalks and ladder-style crosswalks from the perspective of an approaching driver.

Wrangell Cooperative Association and the City and Borough of Wrangell may wish to consider the installation of the higher-visibility crosswalks where the 2006 Wrangell Downtown Revitalization Plan suggested crosswalk additions. Additionally, WCA and CBW might also spend some time reviewing the Revitalization Plan's suggestions to develop a project prioritization list for goals that are yet to be achieved. Finally, the Wrangell FAST Act and Other Funding Opportunities tables in the Appendix offer 12 pages of potential grants that will fund these project types.

#### Safe Routes to School

On Monday, May 21, 2018, the consultant and Ms. Lizzy Romane observed the afternoon pick-up dynamics at Stikine Middle School/Wrangell High School. Then, on Tuesday, May 22, 2018, the two spent several hours seeing Evergreen Elementary School's morning drop-off and afternoon pick-up. Additionally, assessment was completed of the existing walking and biking conditions around the two campuses, school zones, and adjacent neighborhoods.

The observation team saw three bicyclists over two days: one adult bicyclist transporting a younger rider; one young middle school boy that was helmetless; and one young female EES student cyclist, who was the only cyclist wearing a helmet (see photo at bottom right) of the four observed on bikes during the morning and afternoon observations.

Former EES Acting Principal, Ms. Therese Pempek, met with Ms. Romane and the consultant; shared EES student population demographics; described the safety challenges facing students as they walk/bike to the EES campus; and elaborated on *SRTS Pre-Site Visit Interview* responses (see Appendix pp. 154 - 155) provided before the site visit. The trio held a preliminary discussion about potential strategies to overcome barriers students face walking and biking to school.

This Safe Routes to School emphasis area was driven by SRTS recommendations within the WCA Crash Data Compilation and recorded from the WCA Tribal Safety Plan Meeting. The emphasis area goal is to improve Wrangellarea infrastructure and the implementation of non-infrastructure education, encouragement, enforcement, and evaluation strategies to increase the number of children walking/biking to school. Nevertheless, Wrangell residents of all ages also will benefit from the emphasis area's targeted strategies in the categories of:

- Education
- Encouragement
- Enforcement
- Engineering
- Evaluation.





SRTS bike education of Wrangell sidewalk cyclists can provide training about how to avoid the danger of getting "right-hooked" by drivers and the importance of wearing helmets.





Looking at EES' entrance from the Wrangell Medical Center desire line egress



Second Avenue ingress, the paving of which will reduce District Office parking lot degradation due to drainage

### **Issues/Opportunities - Evergreen Elementary School**

Built on a muskeg, and bordered to the northwest by Bennett Street, the Evergreen Elementary School campus sits in the square area of land east of First Avenue, which runs in a north-northeast to south-southwest direction and forms the western EES campus boundary. Bennett Street advances in a northeastern direction up a gradual incline to Ishiyama Drive at which point it becomes Airport Loop Road, and begins heading north-northwest in a counterclockwise loop towards Wrangell Airport. Second Avenue forms the eastern boundary of the EES campus property, and gives community access to the WPS District Office, Volunteer Park and Ballfields, and Volunteer Trail.

Two of the most common pedestrian access points are heading north-northeast along Bennett Street from the Zimovia Highway, Bennett Street, and Wrangell Avenue junction, and along Bennett Street south-southwest from Second Avenue. Despite warnings from EES staff and some near misses with vehicles, a few elementary students access the property by cutting through a wooded area using an earthen desire line, which runs just east of the Conex storage container at the west end of the driveway/parking area behind Wrangell Medical Center (WMC). The desire line connects the Medical Center's southwestern parking lot to the SEARHC property driveway directly across from EES' main entrances (see middle photo at left).

There are three vehicle access points onto the EES campus: the First Avenue ingress from Bennett Street (see top photo at left), from the northeast parking lot of Wrangell Medical Center, and from Bennett Street east of the EES campus complex using Second Avenue into the Wrangell Public School District Office parking lot (see bottom left photo).

It is important to reiterate that improving conditions for drivers is never the intent of SRTS program development. That being said, until such time as the EES parking lot and First Avenue can be paved, and First Avenue outfitted with sidewalk, curb, and gutter, student-vehicle conflicts and traffic flow hazards will need to be minimized with parent driver and student education, increased EES staff support of students crossing the afternoon pick-up traffic queue, and

the potential installation of parking and traffic flow signage.

The narrative for this emphasis area focuses heavily on EES' drop-off and pick-up characteristics, because existing conditions increase the risk of adverse student-vehicle interactions and discourage walking/biking. Since the morning drop-off encompasses a greater span of time, and therefore, is less congested, it tends to present fewer perilous student conditions and encounters (see top photo at right). Nonetheless, as is often observed on school campuses, afternoon pick-up presents safety concerns, in that parent drivers seeking to save time by avoiding the vehicle queue put their own children and other students at increased risk by their refusal to follow the suggested traffic flow pattern. Thus, while student pedestrians of all ages exhibit safe walking behaviors, impatient parent drivers in their midst put them in jeopardy.

Drop-off and pick-up occurs predominantly from the First Avenue ingress at Bennett Street. A few parents complete morning drop-off using the District Office parking lot immediately west of Second Avenue, and a few parents zip across First Avenue from Wrangell Medical Center into the EES parking lot.

The safest traffic flow pattern is a counterclockwise circuit through the EES parking lot whereby vehicles traverse most of First Avenue, turn left into the EES parking lot across from the Head Start driveway, and pull up to release their children from their vehicle's passenger side directly onto the EES sidewalk in front of the school's entrance. Parents then exit the parking lot at its northwestern corner to avoid pinch points with other drivers entering/exiting the parking lot. In an effort to maintain safe student conditions, at the beginning of SY19-20, EES staff may consider presenting parents with the school's approved pick-up and drop-off traffic flow pattern as well as Visitor Parking regulations.

The majority of parents enter/depart the campus per the suggested traffic flow pattern detailed above. However, the most dangerous vehicle-pedestrian conflicts result from parents completing *three different drop-off and pick-up maneuvers*, instead of following the same flow. For example, during afternoon pick-up, pinch points were noted



Morning drop-off at Evergreen Elementary School

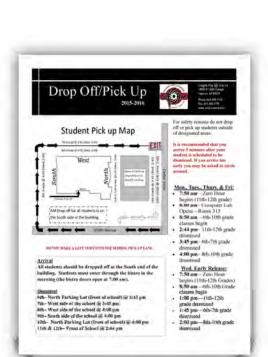


EES parents arrive/stage early for afternoon pick-up; thus, a greater volume of traffic passes through the lot within a shorter time span.



Bennett Street, First Avenue, and the WMC egress (in front of the white car at left) = a tough pinch point when vehicles and pedestrians interact in the same space.

When possible, the safest traffic flow pattern on any school campus follows two basic rules: 1) parent and local vehicle traffic flow should be separated from that of the school bus(es); and 2) students should be released from the passenger side of their parents' vehicles into a pedestrian-friendly area from which they can walk to their school's front door..



when two vehicles would attempt to enter/exit the parking lot at the same time in the same place. Conflicts also result when parent drivers enter the traffic queue from Wrangell Medical Center, thereby impeding the ingress and egress of traffic to and from Bennett Street along with the ingress and egress of Evergreen Elementary School parking lot traffic.

These two errant traffic flow patterns create several potential conflicts with:

- traffic exiting the northwestern corner of the EES parking lot with right turns towards Bennett Street (because Wrangell Medical Center drivers exit directly across First Avenue from EES drivers);
- students crossing First Avenue in the school crossing, who (despite being accompanied by the Crossing Guard) have to be aware of traffic from the school, the Medical Center, and Bennett Street; and
- students forced to cross through the afternoon pick-up traffic queue to enter parent vehicles parked in Visitor Parking within the middle of the EES parking lot.

The consultant suggests that a formal traffic flow pattern be established; published in the school newsletter and local newspaper as a map (like that at left and in the Appendix on p. 156); posted on the EES website; and detailed at a mandatory Parent Orientation at the beginning of the 2019 - 2020 school year. That Parent Orientation should include a PowerPoint presentation with the consultant's site visit photos, so that parents can see the safety concerns their children face when dealing with inconsistent drop-off and pick-up procedures.

When possible, the safest traffic flow pattern on any school campus follows two basic rules: 1) parent and local vehicle traffic flow should be separated from that of the school bus(es); and 2) students should be released from the passenger side of their parents' vehicles into a pedestrian-friendly area from which they can walk to their school's front door.

The easiest and most economical way for EES to achieve the above two goals is to encourage and enforce the traffic flow

pattern described on page 68. Signage that directs parents to make a counterclockwise circuit through the school parking lot from the First Avenue ingress could improve safety. The addition of some "...Please move forward..." signs along the EES sidewalk in front of the school would encourage parents to remain attentive and keep traffic moving while in the afternoon pick-up traffic queue.

One of the easiest and most economical ways to improve student safety immediately is for EES staff to consider designating four spots south of the light and power poles just north of the Head Start driveway and south of Staff Parking. Students and parents then could avoid crossing the traffic queue by heading to/from their vehicles by traveling south along the sidewalk in front of the school and a walking a route that runs south of the traffic flow. Another alternative may be to train volunteer Parking Lot Monitors to walk students through the afternoon traffic queue to their parents' vehicles within the existing combined Staff/Visitor Parking area. Thus, the current risks EES students face navigating through a busy traffic queue with many high-profile vehicles, whose driver's may not see them, will be reduced.

The consultant recommends the following several changes to Staff Parking and to the current traffic flow pattern to improve student pedestrians' (and future bicyclists') safety:

- WPS and EES collaborate with CBW, AKDOT&PF, and WCA to install signage along the school sidewalk, within the EES' parking lot, and District Office parking area west of Second Avenue:
  - a. "Staff Parking Only," "Visitor Parking Only," and "...Please Move Forward..." signage will direct parents where to queue, while minimizing parking within the area designated for Staff Parking.
  - b. Beginning two parking spots north of the power and electric poles towards the south lot, then again for four spots south of the electric pole, install "Visitor Parking Only" and "No Student Drop-off or Pick-up" signage to define the Visitor Parking area.











First Avenue parking narrows the road drawing students across through-traffic.



Staff Parking: 2 spots left of the white SUV to the dumpster. Visitors park 1 spot left of the white SUV to just north of Head Start's driveway.



EES staff might consider temporary installation of bollards and chain in front of staff and visitor vehicles to prohibit their pulling forward, and direct pedestrians around the chain to the south end of the sidewalk in front of the school entrance.

- c. Within the District Office parking area, install "Staff Parking Only. Others Will be Towed" and "No Student Drop-off or Pickup" signage to prohibit visitor or drop-off parking other than in EES' Visitor Parking or through-lane areas in front of the school.
- d. Until curbing installation between First Avenue and the EES parking lot, and a paved parking lot (designed with landscape islands to distinguish the traffic throughlanes from the Staff and Visitor Parking areas) is constructed, erratic vehicle ingress/egress into the middle of the lot will continue. Parents that currently use the Staff/Visitor Parking areas for pick-up will still be able to pull forward unexpectedly into the prescribed traffic queue confusing other drivers. Thus, EES staff may wish to consider temporary installation of brightlycolored bollards and chain to create an eastern barrier in front of both the Staff and Visitor Parking areas. Said barrier will create: (1) a border between parked vehicles and through-traffic; (2) clear demarcation of a counterclockwise traffic through-lane along the school sidewalk and around the Staff and Visitor Parking back to First Avenue; and (3) the need for staff and visitors to back into First Avenue away from students and the busy traffic queue in front of the school. Hanging from the chain, and facing First Avenue to the west and the school to the east, "Staff Parking Only" and "Visitor Parking Only" signage will help define those two parking areas, and eliminate the need for students to cross the traffic through-lane. The bollards and chain can easily be removed when WCA performs periodic blading or parking lot work and/or

when WPS formally paves this parking area.

- Until such time as EES parking lot paving creates a formal northwestern egress, which is offset from the WMC's northeastern driveway, WPS, EES, WCA, and SEARHC collaborate to install:
  - a. two brightly-painted bollards with chain across that WMC driveway exit for a half hour each morning (8 8:30 a.m.) and an hour each afternoon (2 3:00 p.m.) Monday through Friday during the school year.

    Thus, vehicle conflicts with those exiting the EES parking lot will be eliminated during drop-off and pick-up hours. WMC guests and patients can utilize the Center's egress directly onto Bennett Street instead.
  - b. Two back-to-back signs reading "Driveway Access Restricted from 8 8:30 a.m. and from 2 3:00 p.m. Monday through Friday August through May" can be hung from the chain facing east and west for First Avenue and Medical Center drivers to see.
- 3. EES and WMC collaborate with Wrangell Police Department to strictly enforce parking and driveway restrictions. Two warning placards can be placed on vehicles parking within Staff Parking or accessing the lot through the northwestern egress. The third time the vehicle is observed, the Police Department will be contacted to cite and tow the vehicle.

Since most EES students live one to two miles from the school, and there currently are about 30 - 40 students walking on a regular basis - and possibly an additional 13 - 20 students cycling in warmer weather - the school may wish to consider incentivizing walking/biking by allowing those students to be dismissed five minutes earlier than students that are bussed or driven by parents. This allows those students to be safely on their way when the afternoon bus and parent pick-up begins.

During 2014 WCA Tribal Safety Plan development, WCAT staff solicited "existing conditions" letters from the two EES Crossing Guards employed at the time. Quoting Ms. Michelle Mingming's May 19, 2015 letter, "...There is not much lighting up at the crosswalk during winter months.

Sometimes it is hard to see..."

Ms. Deb Robinson's May 18, 2015
letter reiterates Ms. Mingming's
anxiety about limited lighting, "...The
darkness in winter starts early, so more
lights would be nice. This would help
drivers see the children better...

She concludes her letter by stating,
"One final note: the painted lines for
the crosswalk never seem to last a full
year, so they don't show up well. I feel
we could use updating on our
crosswalk to make it safer for our
children..."



EES' bike rack is a typical
"wheel bender" style,
which allows bikes to fall easily.



Increasing visibility of WPS' bike racks by staff will encourage cycling and diminish student fears of bicycle theft.



Installing rows of inverted "U" style bike racks at schools will allow for parking numerous bikes without damage risk.



Church Street school zone signal frozen with both flashers illuminated

Opportunities exist to improve student walking and bicycling safety, as well as their visibility to motorists. Upgrading both the First Avenue and Bennett Street school crossings from transverse line style crossings to ladder-style configurations will improve the crossings' current conditions; make the crossings and the students safer via increased visibility; and extend the new crossings' longevity.

In response to the SRTS Pre-Site Visit Interview "Safety" question, "Have there been any serious pedestrian injuries or fatalities in recent years about which we should be aware?" Ms. Therese Pempek and Ms. Arlene Wilson indicated that, "Uneven sidewalk infrastructure caused a student to fall and scrape their knees." Under the "Policies and Plans" question, "Is this school slated to undergo any type of major reconstruction/renovation project in the near future that might change or improve the parking and circulation pattern on the school grounds?" the two women replied, "No. The focus has been on the parking lot and the roadway..." They then also stated, "[There has been ongoing] discussion of elementary's two parking lots... Ice melt has sidewalk erosion and rutted contributing to students and residents falling."

#### **Issues/Opportunities - Stikine Middle School**

As with nearly every school and student population, Stikine Middle School students would benefit from Safe Routes to School pedestrian and bicycle safety education, encouragement programming, events, and activities. Nevertheless, other than the three cyclists seen bicycling without helmets and the single middle school boy who jaywalked across Church Street during the afternoon dismissal observation, the safety issues adversely impacting students' current abilities to walk and bike to school safely are primarily the result of changes needed to existing infrastructure and drivers' parking behavior. Once school zone signage is improved for the combined Stikine Middle School and Wrangell High School campus, then increased parking enforcement should significantly enhance student safety.

Advancing through the Church Street school zone from its north end, the following infrastructure concerns were

#### noted:

- The programmable, flashing school zone sign at the Church Street school zone's north end freezes up, and thus is ineffective during school drop-off and pick-up hours when needed as an advance warning to drivers of the upcoming mid-block school crossing.
- As stated above, a WCA RSA could include review of the existing Church Street school crossing and other two mid-block crossings between the school crossing and McKinnon Street. Said RSA review is particularly important, because: the Church Street school zone's southern end comprises the Bennett Street school zone's western terminus; and the existing signage volume for the contiguous school zones may be confusing to drivers and pedestrians. Further, mid-block crossing studies have shown that care needs to taken in their design, placement, and demarcation, since:
  - "Drivers do not expect to see pedestrians crossing at midblock locations. Because of this, it is important to have adequate lighting and signage to ensure drivers have the necessary time to stop...
  - ...people with visual impairments are often unable to tell when there is a gap in traffic or whether all vehicles in approaching lanes have stopped... [and] are often unable to determine when it is their turn to cross the street because their customary cue at intersections, the surge of traffic in the street beside them, isn't present (Connecticut Technology Transfer Center, 2014)."
- The Church Street school crossing and additional mid-block crossings are of the parallel-line variety and would be safer and more visible if replaced with ladder-style crossings.
- The "24 Hour Maximum Parking" signage mounted on the same pole as the S2-1 school crossing sign along Church Street's west side seems to encourage illegal 24-hour parking adjacent to the school crossing. Replacement with "No Parking Between

Vital Safe Routes to School-relevant daylighting projects were suggested via several Wrangell Cooperative Association Transportation Safety Survey comments. For example, under Question 3, "Is there a location that you feel is risky, but that you are not aware has had crashes?"

"There is poor visibility of the school crossing in front of the high school."

Then, responding to Questions 6 and 7, "What would make the roads feel safer to you?" and "Other areas of safety concern or comments":

"Tight and congested parking in front of the High School..."

"Areas around schools - lots of places where you can't see around parked cars to pull out."

Per line 15B of Section 3B.18 Crosswalk Markings in the Alaska Traffic Manual Supplement to the 2009 Edition of the MUTCD, "On-street parking shall not be marked for at least 20 feet on either side of a crosswalk (13 AAC 02.340) (Alaska Department of Transportation & Public Facilities)."

Signs" mounted 20' feet north and 20' south of the crossing will allow enforcement of AKDOT&PF's MUTCD crosswalk parking regulations (see text box at left).

 In time, the S2-1 signage should be replaced with yellow green fluorescent S1-1 signage prescribed by the 2000 and 2009 MUTCDs.

A number of strategies for encouraging students to bicycle appear in the tables on the subsequent pages. However, the inexpensive installation of appropriate bicycle-parking infrastructure on campus will diminish student fears of bicycle theft or damage, as the current bike rack is of the "wheel bender" variety that damages bikes if they fall over. The consultant recommends the installation of a concrete pad with numerous "U-style" bike racks like those pictured in the middle photo on page 73.

Excellent support exists in Wrangell for SRTS program development with the opportunity for many local benefits.

SAFE ROUTES TO SCHOOL	
Strategy	Champion(s) or Lead Department Recommended
Edi	ucation
K-12 and parent pedestrian and bicycle	WPS, WCA, CBW, Wrangell PD, Wrangell EMS,
safety education; including, but not limited	SEARHC, WCA Housing, and Alaska State
to appropriate high-visibility attire.	Troopers
Educate the local community about	WPS, WCA, CBW, Wrangell PD, SEARHC, and
appropriate sidewalk usage & the need to	Alaska State Troopers
walk facing traffic where sidewalk	
infrastructure is inadequate or lacking.	
Post SRTS-related and bike/pedestrian	WPS, WCA, and CBW
safety information on Wrangell kiosks for	
local students, parents, and Wrangell	
tourists.	
Provide K-12 and adult bicycle helmet usage	WPS, WCA, CBW, SEARHC, and Wrangell VFD
programs; e.g., the Helmet Your Head	
program.	
Institute SRTS activities at WPS; e.g.,	WPS, WCA, CBW, Wrangell PD, Wrangell EMS,
Walking School Bus Programs, International	SEARHC, USFS, and Alaska State Troopers
Walk and Bike to School Day, bike trains,	
and bike clubs.	

SAFE ROUTES TO SCHOOL		
Strategy	Champion(s) or Lead Department	
	Recommended	
Educ	ation	
Host several Wrangell "Drop & Walk" events	WPS, WCA, CBW, Wrangell PD, Wrangell	
with buses/parents dropping kids off at the	EMS, SEARHC, Alaska State Troopers, and	
City Dock & Wrangell PD parking lot to walk	WHS Peer Educator Program participants as	
with chaperones to school.	chaperones	
Draft traffic flow pattern map, and present it	WPS, WCA, and CBW	
to Parent Orientation at start of SY19 - 20.		
Encoura	egement	
Develop a Safest Routes to School map	WPS, WCA, CBW, and USFS	
showing the safest existing routes to school		
away from high-speed roadways and utilizing		
local trails, sidewalks, and paths.		
Issue punch cards to incentivize students	WPS, WCA, CBW, Wrangell PD, Wrangell	
walking/biking to school. Zak's Café, Hungry	EMS, SEARHC, WCA Housing, Alaska State	
Beaver Pizza, or J&W's Fast Food could	Troopers, USFS, and local businesses	
provide food prizes.		
Continue to offer local bike helmet giveaways	WPS, WCA, CBW, Wrangell PD, Wrangell	
with fittings & training about helmet care.	EMS, Wrangell VFD, and SEARHC	
Institute SRTS activities at WPS; e.g., Walking	WPS, WCA, CBW, Wrangell PD, Wrangell	
School Bus Programs, bike trains, bike clubs,	EMS, Wrangell VFD, SEARHC, USFS, Alaska	
and walking/biking mileage tracked like	State Troopers, and local businesses	
books read.		
Host several Wrangell "Drop & Walk" events	WPS, WCA, CBW, Wrangell PD, Wrangell	
with buses/parents dropping kids off at the	EMS, Wrangell VFD, SEARHC, USFS, Alaska	
at the City Dock & Wrangell PD parking lot to	State Troopers, local businesses, and WHS	
walk with chaperones to school.*	Peer Educator participants as chaperones	
Engage Wrangell businesses to sponsor	Wrangell businesses, Wrangell Chamber of	
various SRTS, walking and biking events.	Commerce, and WCA	
Host Walk/Bike Wrangell Trails Days	USFS, WCA, WPS, Wrangell PD, Wrangell VFD,	
	SEARHC, Alaska State Troopers, and local	
C. LAM H.CDTCT	businesses	
Start Wrangell SRTS Teams with education,	WPS, WCA, CBW, Wrangell PD, Wrangell	
enforcement, health & wellness, recreation &	EMS, Wrangell VFD, SEARHC, USFS, Alaska	
local businesses/churches representatives	State Troopers, Wrangell Parks and	
	Recreation, local businesses, and churches	
	ement	
Increase periodic school zone speed, Church	Wrangell PD, WPS, CBW, and WCA	
Street parking, and EES parking lot		
enforcement.	MICA MIDC Mississall DD Mississall MED	
Provide an annual bike rodeo event in	WCA, WPS, Wrangell PD, Wrangell VFD,	
Wrangell.	Wrangell EMS, SEARHC, and local businesses	

SAFE ROUTES TO SCHOOL		
Strategy	Champion(s) or Lead Department Recommended	
Enfo	prcement	
Pursue AKDOT&PF Transportation Alternatives Program grant funds to purchase mobile radar speed trailers for use within a two-mile radius around each	WCA, WPS, CBW, and Wrangell PD	
of the two school zones.	• •	
	rineering	
Install additional WPS parking and school zone signage/demarcation.	WCA, WPS, CBW, and RSA Team	
Replace dysfunctional flashing school zone lighting.	WCA, WPS, CBW, RSA Team, and AKDOT&PF	
Consider installation of additional school crossing lighting along with enhanced lighting of the Church Street mid-block crossings.	WPS, CBW, WCA, and AKDOT&PF	
Consider installing bollards and chain in EES parking lot & across SEARHC driveway	WPS, CBW, WCA, SEARHC, and AKDOT&PF	
Extend existing Zimovia Highway Multi-Use Path	WCA, CBW, and AKDOT&PF	
Formalize multiuse trails and paths	WCA, CBW, USFS, and potential Wrangell property owners	
Replace parallel-line school crossings on Bennett and Church streets, and across First Avenue with ladder-style school crossings	WCA, WPS, CBW, and AKDOT&PF	
Complete Wrangell sidewalk/multi-use path installation such that students may walk and bike from WPS to their homes.	WCA, WPS, CBW, and AKDOT&PF	
Perform a review of the two school zones' school crossings, crosswalks, parking zones, and intersections for compliance with "daylighting" pedestrian safety concepts.	WCA, WPS, CBW, and AKDOT&PF	
Evaluation		
Conduct SRTS School Arrival & Departure Tally Sheets in WPS school classrooms	WPS, WCA, and CBW	
Conduct SRTS Parent Surveys	WPS, WCA, and CBW	
Conduct WPS school zone area RSA	WPS, WCA, CBW, and RSA Team	

#### **Marine and Watercraft Safety Awareness**

As was revealed in this plan's Introduction, boating in the Wrangell Island area is a way of life. "Many community members are introduced to being out on the water at an early age for work, recreation and/or subsistence. Parents, children, coaches, supporters and school faculty travel every year by ferry, fishing or charter boats to other communities to participate in school related activities, and it is crucial that all are informed on how to survive if something bad were to happen on the water..." (Wrangell Coooperative Association, 2014). In fact, marine and watercraft safety are such large parts of the community's fabric that this emphasis area is repeated from the 2014 WCA Tribal Safety Plan.

The "Data Summary" section presented some sobering statistics about Alaska's boating fatalities. However, those statistics failed to mention that drowning is the second leading cause of death for Alaskan children. Such a concern is this specific safety issue that boating-related safety was mentioned ten times within the "Existing Safety Efforts" section of the plan. For example under "Education," "Alaska Marine Safety Education Association Online Cold-Water Safety Training," "Wrangell Swimming Pool and Recreation Facility seasonal swimming lessons for kids and adults, cold water rescue and survival, periodic lifeguard and Water Safety Instructor trainings" were mentioned.

"Improve community members' access to AMSEA boating safety trainings" was listed as the seventh bullet point under the "Education" heading within the "What's Needed?" section of this WCA Tribal Safety Plan Update while "Continue work with the State's Kids Don't Float Program and other funding sources to purchase additional floatation devices for checkout by the public and for Wrangell dock installation" was added under the category of "Engineering."

"Failure to use life jackets" and "Driving/boating while intoxicated" each were marked five times in response to Question 5, "Which of the following are transportation safety concerns to you?" on the WCA Transportation Safety Survey.



A private Wrangell vessel with "Elephant Nose" (aka the tip of Woronofski Island) in the background

...marine and watercraft safety are such large parts of the community's fabric that this emphasis area is repeated from the 2014 WCA Tribal Safety Plan.



Wrangell's City Dock is an extremely popular place. Note the speedboat zooming in from the top right.



Considering WCA Tribal Safety Plan Meeting attendees' suggestions, WCA Transportation Safety Survey remarks, and the Alaska Office of Boating Safety's admonition that "An unprepared boater is taking unnecessary risks," this emphasis area's goal is to introduce Marine and Watercraft Safety Awareness to Wrangell youth at an early age, and to increase Wrangell residents' and visitors' understanding of what safe boating requires; e.g., sobriety, proper equipment, boating skills, and preventative measures.

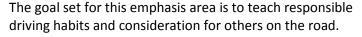
BOATING SAFETY IMPROVEMENTS		
Strategy	Champion(s) or Lead Department Recommended	
Acquire portable GPS units for lending out to the general public	WCA, CBW, Wrangell EMS, Wrangell Harbormaster, Coast Guard, AKDOT&PF, and FHWA	
Research/pursue funding to purchase portable satellite/GPS tracking device for lending	WCA, CBW, Wrangell EMS, Wrangell Harbormaster, Coast Guard, AKDOT&PF, and the US Department of Justice CTAS Program	
Develop partnerships between local fishermen, recreational boaters, Alaska Marine Highway System, the Wrangell Harbormaster, Coast Guard, WCA, AMSEA, WPS, CBW, and the Alaska Office of Boating Safety.	Local fishermen, recreational boaters, Alaska Marine Highway System, Wrangell Harbormaster, Coast Guard, WCA, AMSEA, WPS, CBW, and the Alaska Office of Boating Safety	
Integrate a mandatory Kids Don't Float Program in WPS schools through the Peer Educator Program, which trains high schoolers to teach the program to elementary school children	CBW, Wrangell EMS, Wrangell Swimming Pool and Recreation Facility, WHS Peer Educator Program, Wrangell Harbormaster, Coast Guard, WCA, WPS, and the Alaska Office of Boating Safety	
Collaborate with the Alaska Marine Safety Education Association (AMSEA) to ensure that Wrangell AMSEA courses are offered regularly.	CBW, Wrangell EMS, Wrangell Swimming Pool and Recreation Facility, WHS Peer Educator Program, Wrangell Harbormaster, Coast Guard, WCA, WPS, and AMSEA	
Improve existing emergency safety communication systems between local boaters, the Harbormaster, and the Coast Guard.	CBW, Wrangell EMS, Wrangell Harbormaster, Coast Guard, and WCA	
Continue work with the Kids Don't Float Program and other funding sources to purchase additional floatation devices for checkout by the public and for Wrangell dock installation	CBW, Wrangell EMS, Wrangell Harbormaster, Coast Guard, and WCA	

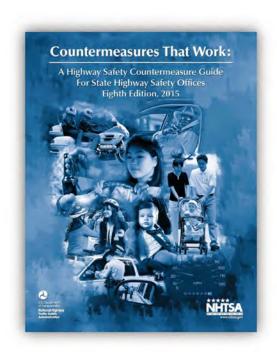
#### **Driver's Education**

The need for Driver's Education has been cited several times within this plan. "Wrangell drivers lack formal Driver's Education" was listed under "Education" and "Encouragement" within the "Existing Safety Challenges" recorded by WCA Tribal Safety Plan Meeting attendees.

Item 1 on both the "Education" and "Encouragement" lists within the "What's Needed?" section of this plan propose "Development of a Wrangell High School Driver's Education Program," and "Encourage Wrangell High School drivers to participate in future Driver's Education classes" respectively.

Continuing the theme of the previous Driver's Education suggestions, two survey respondents checked "Young drivers not knowing rules of road" in answer to Question 5 on the *WCA Transportation Safety Survey* "Which of the following are transportation safety concerns to you?" Two survey respondents also checked "Driver education" in answer to Question 5.





DRIVER'S EDUCATION		
Strategy	Champion(s) or Lead Department	
Strategy	Recommended	
Pass a Public Safety ordinance supporting	CBW, WCA, WPS, local elders, Wrangell PD, and	
Driver's Education	Alaska State Troopers	
Research/pursue funding to develop a WHS	WHS, CBW, and WCA	
Driver's Education program, purchase a driver		
training vehicle & fund a certified instructor		
Research online and Juneau-area driving schools	WHS, CBW, and WCA	
and other service providers, plus their pricing		
Implement a multimodal Driver's Education	CBW, WCA, WPS, local elders, Wrangell PD, and	
curriculum (including driving in proximity to	Alaska State Troopers	
cyclists and pedestrians) for WHS students and		
Wrangell adults		
Research state requirements for ATV, snow	CBW, WCA, Wrangell PD, and Alaska State	
machine, and boating licensing	Troopers	
Send WCAT staff to the May 8, 2019 CPS	WCAT, Alaska Injury Prevention Center, and the	
<u>Technician Certification Course</u> .	National Child Passenger Certification Program	

DRIVER'S EDUCATION	
Strategy	Champion(s) or Lead Department Recommended
Educate Wrangell drivers & parents about the proper use & installation of child safety seats via WCA & SEARHC newsletters, websites & the continuance of local inspection & training events through Alaska Injury Prevention Center, SEARHC Social Services & Wrangell PD.	Alaska Injury Prevention Center, SEARHC, Wrangell PD, Alaska State Troopers, WCA, WPS, local elders, and CBW
Educate local drivers & teens to receive their Driver's Licenses & teach them about proper signaling, traffic signage, vehicle passing, stopping for school buses, various hazardous driver behaviors, as well as the dangers of texting and driving.	CBW, WCA, WPS, local elders, Wrangell PD, and Alaska State Troopers
Pursue funding for WCA to purchase child safety seats both for giveaway & training purposes.	WCA, Alaska Injury Prevention Center, SEARHC, and CBW
Educate local drivers, parents, and teens that seek Driver's Licenses about driving in school zones.	Wrangell PD, Alaska State Troopers, WCA, WPS, local elders, and CBW
Consult CDC <u>Teen Driving Resources</u> & reference National Highway Traffic Safety Administration (NHTSA) <u>Countermeasures that Work</u> for teen driving program development	WCA, WPS, CBW, Wrangell PD, and Alaska State Troopers

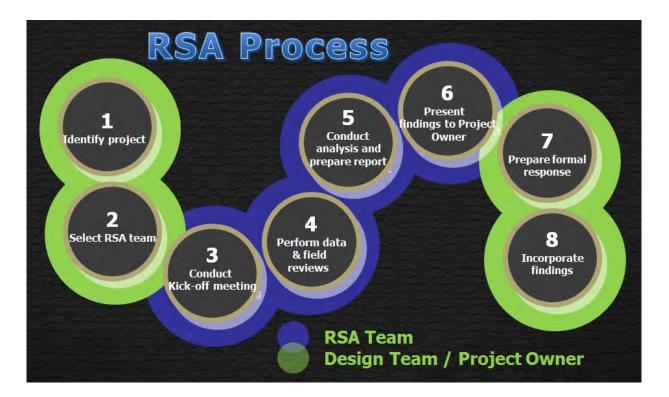


WCA might consider kicking off its initial
Transportation Safety Management
Committee meetings by inviting the
same vocal and proactive local
representatives who attended the May
Tribal Safety Plan Meeting.

#### **Transportation Safety Management**

"The community of Wrangell currently does not have a committee dedicated solely to addressing transportation safety issues. There are several local entities with common purposes that could benefit from increased communication and coordination" (Wrangell Cooperative Association, 2014). Thus, the goal for this emphasis area is to develop a formal Transportation Safety Management Committee that will meet regularly to identify Wrangell transportation safety issues, and develop strategies for addressing them through education programs, transportation and safety planning, and transportation safety activities/events.

Implementation strategies include: (1) Committee creation; (2) development/passage of a WCA Tribal Council resolution supporting the Committee, and (3) the realization of local safety goals via assignment of safety campaign topics and activities to the appropriate local champions.



#### **Road Safety Assessment**

Areas to review during RSA:

- Wrangell roadways with a higher incidence of traffic accidents or speeding; e.g., Zimovia Highway, Front Street, Church/Second Street, Case Avenue, Wrangell East/Spur Road, Stikine Avenue, etc.;
- Wrangell intersections (e.g., Stikine Avenue, Federal Way, and Front Street junction); roadway surface and lighting conditions; signage, sidewalk, and potential ladder-style crosswalk locations;
- Roadways leading into and out of the school zones;
  e.g., school zone demarcation (including potential
  replacement of the programmable, flashing school
  zone sign on Church Street's south side and ladderstyle school crossings), Evergreen Elementary
  School parking, pedestrian/vehicle traffic, roadway
  speeds, possible crossing guard locations, and other
  challenges that may affect student safety;
- Airport Loop Road and other Wrangell roadways for the potential installation of pedestrian and bicycle infrastructure; and



A Wrangell road safety assessment could potentially review the intersection alignment and sight lines at the Case Avenue, Berger Street, and Zimovia Highway junction where a failure to yield caused four minor injuries.

There are two primary funding sources that the Wrangell Cooperative Association can pursue to pay for a Road Safety Assessment to be completed locally:

- a) Apply for approximately \$10 -\$20,000 in Tribal Transportation Program Safety Funds grant monies to cover the project scope, the audit team's travel expenses, and the report writing required to complete an RSA; or
- b) Utilize WCA Tribal Council's Tribal Transportation Program funding to cover the Road Safety Assessment costs.



2011 Elliot Highway RSA Team (left to right): Byron Bluehorse, Alaska TTAP; Jeff Jeffers, AKDOT&PF; Adam Larsen, FHWA; and Chris Terry, Alaska State Troopers. Not pictured: Lawrence Bredeman, ATTS, Inc.

• local trails - focusing on desire lines, as well existing trails and paths.

Road Safety Assessments typically follow a proven process to systematically analyze available information and existing site conditions to determine what elements of the... roadway's safety performance may present higher risks to motorists (Larsen, 2011). While these Road Safety Assessments more frequently take place along state and local routes entering rural communities, Wrangell Cooperative Association can request an RSA for the Wrangell community. Therefore, the goal for the Road Safety Assessment emphasis area is to consider requesting the completion of a Wrangell RSA.

Steps involved in requesting and completing a Wrangell Road Safety Assessment might include:

- 1. Identify the project area to assess, and obtain the permission of Wrangell roadway facility owners to conduct the RSA.
- 2. Complete and submit the Western Federal Lands Highway Division *Tribal Request for Services Form* to the contact person shown on the form (see Appendix pp. 147 151), and include a parcel map showing the Wrangell routes needing RSA review.

(There are two primary funding sources that the Wrangell Cooperative Association can pursue to pay for a Road Safety Assessment to be completed locally:

- a) Apply for approximately \$10 \$20,000 in Tribal Transportation Program Safety Funds grant monies to cover the project scope, the audit team's travel expenses, and the report writing required to complete an RSA; or
- b) Utilize WCA Tribal Council's Tribal Transportation Program funding to cover the Road Safety Assessment costs through the Western Federal Lands Highway Division.
- 3. Form a team (e.g., Mr. William Willard, Ms. Lizzy Romane; Mr. Byron Bluehorse, University of Alaska-

Fairbanks, Chief Doug McCloskey; an available AKDOT&PF staff person; and an available Alaska State Trooper).

- 4. Conduct a kick-off meeting with Road Safety Assessment staff.
- 5. Collect documented crash data.
- 6. Host a WCA Tribal Council Road Safety Assessment Public Meeting in Wrangell.
- 7. Conduct data and field review
  - a. Review documented crash history
  - b. Conduct a field visit to identify safety risks
- 8. Prepare Road Safety Assessment.
- 9. Present a brief report out to Wrangell stakeholders and to AKDOT&PF.
- Prepare a final written Road Safety Assessment report with a complete list of findings and recommendations.

The final step in the process is for the facility owner(s) to write a response to the recommendations of the Road Safety Assessment report, and discuss any planned actions.

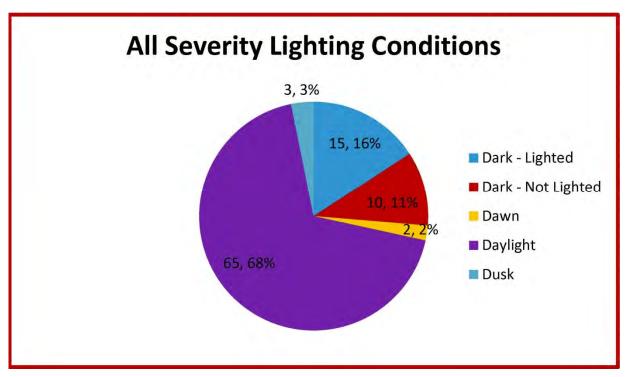
### **Other Safety Areas**

Several additional safety areas were discussed/reviewed during this TSP's development; however, meeting and survey participants opted not to include them as priority emphasis areas at this time. In May 2019, WCA and other local stakeholders can revisit the progress made on implementing the suggested strategies and activities listed for each respective emphasis area. At that time, the topic areas listed below can be reexamined for possible inclusion in a future plan.

#### Night and/or Low-Light Crashes

Fifteen of the 295 "All Severity" crash types between 1976 - 2018 took place on "dark - lighted roadways" while 10 of the 295 took place on "dark roadways - not lighted," and five occurred during twilight hours. One serious injury crash happened on a "dark roadway – not lighted" and four transpired in daylight conditions. The bulk of Wrangell's crashes are happening during daylight hours. Nevertheless, WCA TSP Meeting attendees cited "limited visibility for

"Road Safety Assessments typically follow a proven process to systematically analyze available information and existing site conditions to determine what elements of the... roadway's safety performance may present higher risks to motorists" (Larsen, 2011).



drivers, pedestrians, and cyclists in low-light and dark conditions" under the engineering category of "Existing Safety Challenges." Thus, this topic is a local concern - particularly because WCAT staff included LED lighting and lighting updates as priorities under the "LED Lighting Projects" sub-heading of the Large-Scale Roadway/Trails Improvement Projects emphasis area. (Please see the pie chart above.)

Wayfinding: Crash Locating and Trail Marking

Assessment of the presence, visibility, and condition of existing trail markings could be added to a Wrangell-area RSA. Otherwise, a formal request for trail marking improvements also can be made to AKDOT&PF or FHWA.

WCA TSP meeting attendees indicated that improved mile markers along trails would improve emergency incident response times, and that existing markers may not be sufficiently accurate for emergency reporting. The Alaska State Troopers within Southeast Alaska often state that improved trail and logging road signage would help them locate crashes and better respond to emergency calls.

## **Implementation & Evaluation**

#### **Implementation**

Of the eight aforementioned emphasis areas, there are only a few with which the Wrangell Cooperative Association may have limited involvement. WCA certainly can focus on and assist the Wrangell area through education, engineering, planning, and grant writing support. All of the emphasis areas listed demonstrate what can be done to achieve this plan's goal to, "...improve the overall safety of the Wrangell area transportation system, while also decreasing the risk of fatalities and serious injuries resulting from incidents on or adjacent to the transportation system" if the "Champion(s) or Lead Department(s) Recommended" communicate, coordinate, and collaborate with WCA to implement the strategies outlined.

This plan makes no attempt to dictate that area departments, organizations, or agencies must implement projects for which they may not have budgeted, or have limited resources. Nonetheless, the plan offers guidance for activity and project planning. Of course, all Wrangell Cooperative Association plans require approval by the WCA Tribal Council prior to implementation.

In terms of the above WCA-specific strategies, in many cases, the tribe is currently in various stages of project planning/development. In fact, a number of the projects listed on WCA's pending FHWA TTIP include the very engineering improvements suggested within this plan. Safety considerations frequently drive TTIP projects.

Throughout the development of this plan, the plan development participants and consultant strove to align the emphasis areas, strategies, and activities with the *Alaska Strategic Highway Safety Plan*, other local, regional, and WCA plans. The plan development process made clear that all of the stakeholders involved have similar goals and visions for the Wrangell and Wrangell Island area. Again, although this document repeatedly is identified as a *Tribal Safety Plan*, it is truly more of a Safety Action Plan, as its focus is on the entire Wrangell area with strategies and intentions that reach far beyond the limits of transportation improvement or an exclusively tribally centered agenda.

Of course, all Wrangell Cooperative Association plans require approval by the WCA Tribal Council prior to implementation.

## **Implementation & Evaluation**

#### **Evaluation**

Each previously detailed emphasis area was discussed by meeting attendees and survey respondents as part of this plan's development process. Further, the preceding pages summarize strategies, which will allow WCA and its many safety partners to improve and/or positively impact safety in each area of concern. As was recommended in the Implementation section, these strategies and activities should drive a Safety Action Plan for the tribe, which should be evaluated and updated as conditions change over time.

Even though the Tribal Transportation Program Safety Fund considers Tribal Safety Plans to be outdated after five years, it is the consultant's recommendation that progress on the implementation of the emphasis area strategies be reviewed at least every six months with an annual review of the plan as a whole being undertaken at least once a year (Office of the Federal Register, 2017).

This plan makes no attempt to dictate that area departments, organizations, or agencies must implement projects for which they may not have budgeted, or have limited resources. Nonetheless, the plan offers guidance for activity and project planning.

#### **Next Steps**

Safety remains a vital factor when the WCA evaluates potential projects for inclusion in its Tribal Transportation Improvement Plan. Wrangell Cooperative Association's transportation and safety project planning is guided by available crash data; the transportation priorities summary from the 2011 and 2013 WCA Long Range Transportation Plan Updates; Tribal Council recommendations, public input regarding community needs; as well as tribal and local area transportation and safety-related planning documents like this Tribal Safety Plan Update.

Although grant funding is becoming ever more limited and competitive, the Federal Highway Administration's Tribal Transportation Program Safety Funds are a good source of dollars for completion of many of WCA's safety projects. As was detailed in this plan's Introduction, one of the eligibility criteria for these funds is that a tribe has a safety plan in place.

Quoting from Section 3.2 "Emphasis Areas," on page 3-1 of the September 2007 Alaska Strategic Highway Safety Plan, "The three primary emphasis areas are driver behavior, special users of the transportation system, and highways. Each emphasis area addresses multiple problem areas, including:

- Driver Behavior Crashes involving impaired driving, speed and aggressive driving, young drivers, and unlicensed/suspended/revoked drivers.
- Special Users of the Transportation System -Crashes involving pedestrians, motorcyclists, and bicyclists; and
- 3. Highways Lane departure crashes, crashes at intersections, and crashes involving moose.

Two additional issues were discussed in great detail, although not designated as separate emphasis areas: 1) data; and 2) OHVs." The 2013 SHSP Revision reiterates these same three emphasis areas, but has some slight language changes; e.g., the category of "Driver Behavior" now lists: impaired driving, young drivers, older drivers, and occupant protection as its focus areas. Instead of the third

"...the TTPSF will only fund highway safety improvement projects eligible under the HSIP as listed in 23 U.S.C. 148(a)(4)... Eligible projects described in section 148(a)(4) include strategies, activities, and projects on a public road that are consistent with a State strategic highway safety plan and correct or improve a hazardous road location or feature, or address a highway safety problem..." (Office of the Federal Register, 2017). Said projects may include, but are not limited to "...development and revision of transportation safety plans, crash data improvement, road safety audits, and other activities, primarily infrastructure improvements, as listed in 23 U.S.C. 148(a)(4)" (Federal Highway Administration, 2018). For purposes of the TTPSF, for a project to be consistent with a State's SHSP, it must be data-driven or address a priority in an applicable tribal transportation safety plan that considers the priorities and strategies addressed in the State SHSP. Additionally, to be eligible for TTPSF, infrastructure projects must be included in the tribe's National Tribal Transportation Facility Inventory, as well as its Transportation Improvement Program (TIP)."

## **Next Steps**

category being called "Highways," it is now called "Roadways" with the language edit from "crashes involving moose" to "animal-vehicle collisions" (AKDOT&PF, 2013 Alaska Strategic Highway Safety Plan Revision, 2013). Whether reading the 2007 SHSP or its 2013 revision, all eight of this *Tribal Safety Plan Update*'s emphasis areas align directly with those of the SHSP:

- 1. Emergency Management Services
- 2. Small-scale Roadway/Trails Improvement Projects
- 3. Large-scale Roadway/Trails Improvement Projects
- 4. Safe Routes to School
- 5. Marine and Watercraft Safety Awareness
- 6. Driver's Education
- 7. Transportation Safety Management; and
- 8. Road Safety Assessment.

Many of this TSP's strategies also align closely with specific SHSP strategies and activities, and the *Southeast Alaska Transportation Plan's* emphasis on "maintenance and operation of existing transportation infrastructure and ferry routes."

WCA completed the 2013 Wrangell Cooperative Association Long Range Transportation Plan with an update to its Road Inventory List, and a list of projects proposed for inclusion on the TTIP. WCA is potentially interested in taking the following "Next Steps":

- Submit one (or more) Fiscal Year 2019 Tribal
   Transportation Program Safety Funds grants for the
   next phase of Wrangell-area roadway/trails
   improvement projects and/or the completion of a
   Wrangell-area Road Safety Assessment.
- 2. Collaborating with Wrangell Public Schools and the City and Borough of Wrangell to submit a Fiscal Year 2018 AKDOT&PF Transportation Alternatives Program grant for the: installation of critical ladderstyle school crossings, replacement of the frozen southbound facing programmable, flashing school zone sign on Church Street, and purchase of two inverted-U style bike racks for the Stikine Middle and Evergreen Elementary school campuses, as well as either a mobile radar speed trailer or permanent

"...emphasis areas...in the Strategic Highway Safety Plan for Indian Lands:

- Decision-making Process
- Data Collection
- Run Off the Road Crashes
- Occupant Protection/Child Restraint
- Alcohol/Drug-impaired Driving
- Other Driver Behavior and Awareness
- Drivers under the Age of 35
- Pedestrian Safety.

The emphasis areas outlined in Section 8 of this Tribal Safety Plan align with those identified above."

### **Next Steps**

- mount radar speed sign to improve student pedestrians' and bicyclists' safety within the school zones and two-mile radius of the Wrangell Public Schools.
- 3. Teaming with Wrangell Police Department to submit a Fiscal Year 2019 Department of Justice Coordinated Tribal Assistance Solicitation proposal under "Purpose Area #1," Office of Community Oriented Policing Services (COPS Office), to purchase the computer software, hardware, and equipment needed to update Wrangell's emergency response system to an E-911 system.
- Partner with CBW and the Wrangell Volunteer Fire Department to submit a Fiscal Year 2019 FEMA Assistance to Firefighters grant to replace existing bunker gear.

With formal adoption and effort towards implementation of the *Wrangell Cooperative Association Tribal Safety Plan Update*, WCA will be more competitive in its upcoming safety-related funding pursuits. Wrangell Police Department, Wrangell Public Schools, SEARHC, Wrangell EMS, Wrangell Volunteer Fire Department, and other local agencies may find elements of this *Tribal Safety Plan Update* useful for their future funding pursuits as well.

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Wrangell Cooperative Association Tribal Safety Plan Meeting

The Wrangell Cooperative
Association is working on an update to its Tribal Safety Plan.

Join us for the
Tribal Safety Plan Meeting
to discuss
Wrangell safety concerns & your
ideas for future
roadway safety.



WHEN: Wednesday, May 23, 2018

10:00 a.m.- 2:00 p.m.

WHERE: The Nolan Center, 296 Campbell Drive

Wrangell, Alaska 99929

Contact Person: William Willard,
Tribal Transportation Program Manager
For More Information: wwillard@wca-t.com or 907-874-3077

## Agenda Topics:

- Local Safety Challenges
- Existing Safety Partners
- Aerial Map Crash Review
- Safety Survey
- Safety Emphasis Areas, etc.

Lunch, snacks, and beverages provided!

Please RSVP to WCA
Transportation staff at the
number or email address below.



# Wrangell Cooperative Association Tribal Safety Plan Meeting

### **AGENDA**

# The Nolan Center 296 Campbell Drive, Wrangell, Alaska 99929

May 23, 2018

10:00 a.m. Welcome and Introductions

WCA Tribal Transportation Program Manager, William Willard

10:05 a.m. **Defining Tribal Safety Plans** 

**Complete Wrangell Transportation Safety Survey** 

10:45 a.m. Map Spot & Mark-Up of Wrangell Area Aerial Maps

11:00 a.m. **Draft Vision Statement for WCA Tribal Safety Plan**Wrangell Existing Safety Partners & Safety Approaches

(These are the partners or practices that WCA is utilizing to address transportation safety; e.g., public education, crash reporting/processes and evaluation, emergency management, or engineering projects.)

11:30 a.m. Blessing and Working Lunch

12:00 p.m. **Development of WCA Tribal Safety Plan** 

Identification/discussion of safety issues and concerns Safety approaches to include; i.e., the "Emphasis Areas" Safety approaches to develop

- Education
- Encouragement
- Enforcement
- Engineering
- Evaluation
- EMS

1:00 p.m. Emphasis Area Implementation Steps

- Identification of implementation steps
- List goals, responsible parties/champions, and strategies for specific emphasis areas

2:00 p.m. Adjourn







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## Wrangell Cooperative Association Transportation Safety Survey

<u>Please email a scan of your completed survey and maps to: lizcabot@wca-t.com</u> with a "cc" to <u>mgtecwtq@gmail.com</u> by Friday, May 18, 2018.

Wrangell Cooperative Association is collecting data for our Tribal Safety Plan. The completed plan will help us identify problem areas, and develop a way to fix them. It also will help us to apply for funding for safety improvements within the Wrangell community. Please help us by doing the following:

- 1) Using a colored marker or pen, place numbers 1 5 on the map locations where you know crashes have occurred.
- 2) Using the numbers you put on the map, please answer the following questions about each crash by checking the boxes that apply.

	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: (Include Mile Marker, if known)		
	THIS CRASH INVOLVED		
ו 1	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):		
Crash 1	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other		
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other		
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: (Include Mile Marker, if known)		
THIS CRASH INVOLVED □Truck □Car □ATV □Pedestrian □Bicycle □Animal □Boat			
2	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):		
Crash	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other		
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other		
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F)		
	APPROXIMATE CRASH LOCATION: (Include Mile Marker, if known)		
	THIS CRASH INVOLVED		
m	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):		
Crash	CAN BEST BE DESCRIBED AS:		
	LIKELY FACTOR(S) IN CRASH:		

	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F)  APPROXIMATE CRASH LOCATION: (Include Mile Marker, if known)
	THIS CRASH INVOLVED □Truck □Car □ATV □Pedestrian □Bicycle □Animal □Boat
4	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):
Crash	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other
-	LIKELY FACTOR(S) IN CRASH:
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: (Include Mile Marker, if known)
	THIS CRASH INVOLVED
5	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):
Crash	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other
-	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other
3)	Is there a location that you feel is risky, but that you are not aware has had crashes?   Yes No  If yes, please circle location on map and describe why you think it is risky.
4)	Are there other crash locations or accident incidents involving animals or boats not shown on the map? Yes No If yes, please describe location and incident.
5)	Which of the following are transportation safety concerns to you? (Please check all that apply.)
	Unsafe, unmaintained roads       ☐ Missing or inadequate road signage         ☐ Lack of school crossing(s)       ☐ Lack of helmet use on ATV, bike or motorcycle         ☐ Talking on phone or texting while driving       ☐ Excessive driving speeds         ☐ Talking on phone or texting while walking       ☐ Driving/boating while intoxicated         ☐ Young drivers not knowing rules of road       ☐ Roadwork or road damage         ☐ Lack of trail marking(s)       ☐ Pedestrian or bicycle safety
	Lack of pedestrian or bike infrastructure       Lack of seatbelt use         Pedestrian visibility and reflectivity       Road dust         Lack of emergency shelters       Driver education
	☐ Intersection safety ☐ Failure to use life jackets
6)	What would make our roads safer?
7)	Other areas of safety concern or comments:

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- 1) Using a colored marker or pen, place numbers 1 5 on the map locations where you know crashes have occurred.
- 2) Using the numbers you put on the map, please answer the following questions about each crash by checking the boxes that apply.

	APPROXIMATE CRASH DATE: 7/20/76 APPROXIMATE TIME OF DAY: 2:00a DRIVER'S AGE: 20s DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: 1 Mile Zimovia Highway (Include Mile Marker, if known)				
Crash 1	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
	CAN BEST BE DESCRIBED AS:  Pedestrian was hit  Stationary object was hit (e.g., power pole) Other Chlorinator Plant				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting				
	APPROXIMATE CRASH DATE: 1998? APPROXIMATE TIME OF DAY: DRIVER'S AGE: 20s DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: 7-8 miles on Zimovia Highway at the Bluffs (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 2	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Hit guard rail				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting				
	APPROXIMATE CRASH DATE: 2005 APPROXIMATE TIME OF DAY: Afternoon DRIVER'S AGE: 70-80 DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: Front Street (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 3	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other An elderly man with health problems had a heart attack while driving, and ran into a building.				
	LIKELY FACTOR(S) IN CRASH:				
	·				

	APPROXIMATE CRASH DATE: Nov 2005 APPROXIMATE TIME OF DAY: 7:00a DRIVER'S AGE: 36 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Ash Street (Include Mile Marker, if known)				
	THIS CRASH INVOLVED □Truck □Car □ATV □Pedestrian □Bicycle □Animal □Boat				
Crash 4	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Whiplash				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Early morning driving to work: plows had not been out yet, and the roads were icy. The vehicle did a 360 going down the hill onto Zimovia Highway.				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: 2012 APPROXIMATE TIME OF DAY: 9:00a DRIVER'S AGE: 18 DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: 5-6 miles on Zimovia Highway at the Bluffs by the mill (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 5	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Vehicle totaled				
ວັ	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Black ice				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: 2015 APPROXIMATE TIME OF DAY: DRIVER'S AGE: 20s DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: Nemo Loop (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 6	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Near miss				
ъ	CAN BEST BE DESCRIBED AS:				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: 2015 APPROXIMATE TIME OF DAY: DRIVER'S AGE: 80s DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: Airport Intersection (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 7	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
გ	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Another vehicle hit				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: Jun 2016 APPROXIMATE TIME OF DAY: DRIVER'S AGE:DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: Nemo Loop (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 8	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
Cra	CAN BEST BE DESCRIBED AS:				
	LIKELY FACTOR(S) IN CRASH:				

	APPROXIMATE CRASH DATE: Jul 2016 APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: Nemo Loop (Include Mile Marker, if known)				
Crash 9	THIS CRASH INVOLVED				
	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Single vehicle lane departure				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting				
	APPROXIMATE CRASH DATE: Dec 2016 APPROXIMATE TIME OF DAY: Noon DRIVER'S AGE: 30+ DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: .3 mile on Spur Road (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 10	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Cuts, bruises, head injury to child as car rolled over into ditch.				
Cra	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Partial rollover of SUV after vehicle crossed the lanes due to icy road conditions				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other Pool of water/ice on the downhill slope creating icy road conditions. It is "unmaintained," but is a major recreation access road.				
	APPROXIMATE CRASH DATE: Dec 2016 APPROXIMATE TIME OF DAY: 8:00a DRIVER'S AGE: 50 DRIVER'S GENDER (Circle M or(F) APPROXIMATE CRASH LOCATION: Zimovia Highway (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 11	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Single vehicle lane departure				
Cras	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: 2016? APPROXIMATE TIME OF DAY: DRIVER'S AGE: 16 DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: 2 miles on Zimovia Highway (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 12	DID THE CRASH RESULT IN □Property Damage □Serious Injury □Minor Injury □Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): leg and head injuries				
ັວ	CAN BEST BE DESCRIBED AS:   Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole)  Other Car went off the road into a ditch				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting				
	APPROXIMATE CRASH DATE: 2016? APPROXIMATE TIME OF DAY: Early Morning DRIVER'S AGE: DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: 5 miles Shoemaker Bay playground (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
13	DID THE CRASH RESULT IN □Property Damage □Serious Injury □Minor Injury □Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
Crash 13	CAN BEST BE DESCRIBED AS:				
	LIKELY FACTOR(S) IN CRASH:				

	APPROXIMATE CRASH DATE: Winter 2017 APPROXIMATE TIME OF DAY: Evening DRIVER'S AGE: 30 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Gymnasium parking lot (Include Mile Marker, if known)				
Crash 14	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Vehicle backed into a second vehicle in the gym parking lot				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: Winter 2017 APPROXIMATE TIME OF DAY: DRIVER'S AGE: 48 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Shoemaker Loop Road (Include Mile Marker, if known)				
	THIS CRASH INVOLVED □Truck □Car □ATV □Pedestrian □Bicycle □Animal □Boat				
15	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Near miss on icy road				
Crash 15	CAN BEST BE DESCRIBED AS: Real mass of the damage of injuries (e.g., broken bonies, nead injury, cuts, etc.). Near miss of the real mass of th				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other This road is often maintained to lower level than the adjacent highway, and is often icy and plowed poorly.				
	APPROXIMATE CRASH DATE: Dec 2017 APPROXIMATE TIME OF DAY: 3:00p DRIVER'S AGE: 44 DRIVER'S GENDER (Circle (M) or F) APPROXIMATE CRASH LOCATION: Zimovia Highway? 12-mile hill before McCormack Creek Road (Circle?) (Include Mile Marker, if known)				
	THIS CRASH INVOLVED Truck Car ATV Pedestrian Bicycle Animal Boat				
16	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): No injury. Sliding near miss.				
Crash 16	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Single vehicle lane departure on slow, icy descent on large hill often slick in winter.				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other Lcy road. Slid across the road.				
	APPROXIMATE CRASH DATE: Dec 2017 APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Spur Road (Ishiyama Road?) (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
h 17	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
Crash	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Vehicle slid into ditch				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting				
	APPROXIMATE CRASH DATE: 2017 APPROXIMATE TIME OF DAY: 9:00a DRIVER'S AGE: 30 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Fish and Game Float Parking Area (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 18	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Truck hit parking structure due to small size and poor design.				
۲	CAN BEST BE DESCRIBED AS:   Rollover  Pedestrian was hit  Bicyclist was hit  Stationary object was hit (e.g., power pole)				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other Poor parking design: too small and crowded. Unsafe backing into traffic.				

	APPROXIMATE CRASH DATE: Jan 2018 APPROXIMATE TIME OF DAY: 2:40p DRIVER'S AGE: 86? DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: .75 mile on Episcopal, Church (& Weber?) Streets (Include Mile Marker, if known)				
19	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Damage to home, signage and second vehicle				
Crash 19	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole)				
Ō	Other Single vehicle lane departure resulting in Rissa Young's house being hit				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: Feb 2018 APPROXIMATE TIME OF DAY: 2-4:00p DRIVER'S AGE: 35 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: Entrance to City Park on Zimovia Highway (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐SUV ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 20	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Truck rolled on side; mirror was broke; oil in air filter; battery broke; and door damaged				
	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole)  LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of				
	Seatbelt Use				
	APPROXIMATE CRASH DATE: Feb 2018 APPROXIMATE TIME OF DAY: 6:00p DRIVER'S AGE: 20 DRIVER'S GENDER (Circle M or F) APPROXIMATE CRASH LOCATION: Just after Nugget Trail Park (Include Mile Marker, if known)				
	THIS CRASH INVOLVED				
21	DID THE CRASH RESULT IN □Property Damage □Serious Injury □Minor Injury □Death				
Crash	Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Dents in frame  CAN BEST BE DESCRIBED AS:   Rollover  Pedestrian was hit  Bicyclist was hit  Stationary object was hit (e.g., power pole)				
Ü	Other Jeep went in ditch				
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting Other Very snowy slide in ditch. Got ??? ???damaged ditch when removing.				
	APPROXIMATE CRASH DATE: Mar 2018 APPROXIMATE TIME OF DAY: 2:00p DRIVER'S AGE: 48 DRIVER'S GENDER (Circle M or (F) APPROXIMATE CRASH LOCATION: 8 mile Bluffs on Zimovia Highway (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
Crash 22	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Near miss with rocks in road from logging damage to Bluffs.				
Cra	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole) Other Near miss: rocks in road from Bluff degradation				
	LIKELY FACTOR(S) IN CRASH:				
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle (M) or F APPROXIMATE CRASH LOCATION: Ferry Terminal (Include Mile Marker, if known)				
	THIS CRASH INVOLVED ☐Truck ☐Car ☐ATV ☐Pedestrian ☐Bicycle ☐Animal ☐Boat				
ih 23	DID THE CRASH RESULT IN ☐ Property Damage ☐ Serious Injury ☐ Minor Injury ☐ Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):				
Crash	CAN BEST BE DESCRIBED AS: Rollover Pedestrian was hit Bicyclist was hit Stationary object was hit (e.g., power pole)  Boat ran into ferry terminal dock, and was impaled on a piling				
	LIKELY FACTOR(S) IN CRASH:  Driving Under the Influence  Excessive Speeds  Road Condition  Dust  Weather  Lack of Seatbelt Use  Lack of Driving Skills  Underage Driver  Vehicle Malfunction  No Helmet  Cellular Phone Use/Texting				

	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle M or F APPROXIMATE CRASH LOCATION: 11-12 mile marker on an unmarked dirt road off Zimovia Highway (Include Mile Marker, if known)					
Crash 24	THIS CRASH INVOLVED					
	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.): Male teenager killed					
	CAN BEST BE DESCRIBED AS:  Pedestrian was hit  Stationary object was hit (e.g., power pole)  Dirt bike coming up over a hill was struck by a vehicle.					
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting					
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle (M) or F APPROXIMATE CRASH LOCATION: 1 mile marker on Petroglyph Beach (Include Mile Marker, if known)					
	THIS CRASH INVOLVED					
h 25	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death					
Crash 25	Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):  CAN BEST BE DESCRIBED AS:   Rollover   Pedestrian was hit   Bicyclist was hit   Stationary object was hit (e.g., power pole)  Boat ran into marker					
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting					
	APPROXIMATE CRASH DATE: APPROXIMATE TIME OF DAY: DRIVER'S AGE: DRIVER'S GENDER (Circle (M) or F APPROXIMATE CRASH LOCATION: 3-4 mile marker on Petroglyph Beach (Include Mile Marker, if known)					
	THIS CRASH INVOLVED □Truck □Car □ATV □Pedestrian □Bicycle □Animal □Boat					
Crash 26	DID THE CRASH RESULT IN Property Damage Serious Injury Minor Injury Death					
Cras	Please describe the damage or injuries (e.g., broken bones, head injury, cuts, etc.):  CAN BEST BE DESCRIBED AS:   Rollover   Pedestrian was hit  Bicyclist was hit  Stationary object was hit (e.g., power pole)					
	Single vehicle lane departure when truck went off road to beach after teenaged driver fell asleep behind the wheel.					
	LIKELY FACTOR(S) IN CRASH: Driving Under the Influence Excessive Speeds Road Condition Dust Weather Lack of Seatbelt Use Lack of Driving Skills Underage Driver Vehicle Malfunction No Helmet Cellular Phone Use/Texting					
3)	Is there a location that you feel is risky, but that you are not aware has had crashes? Xes    Yes       No					
	If yes, please circle location on map and describe why you think it is risky.					
	Pat's Creek (at the third corner before the lake) where over the years, several vehicles have slid off the roadway resulting in minor injuries (primarily to teens) and property damage. The intersection of Federal Way and Second Street across from the					
	library, where due to poor sight lines at the stop sign, there are daily close calls between vehicles. Further, there are near misses daily with drivers backing into the Federal Way through lane of traffic from the head-in parking at the post office. At the					
	Bluffs immediately west of Zimovia Highway between mileposts 6.5 - 8, the rock falls and slides, which are the consequence of					
	clear cutting cause vehicle collisions with rocks and debris and/or vehicles damaged by falling stones and rocks. There have					
	been rollovers and single vehicle lane departures at the five Zimovia Highway curves between mile posts 9.5 to 11 when drivers exceed the speed limit in inclement weather. In the Bluffs area, the right of way is too narrow to accommodate cyclists or					
	pedestrians. There is poor visibility of the school crossing in front of the high school. Parked cars along Church Street's south					
	side impede visibility at the intersection where Church Street turns south 90° by AICS Mental Health. The 8-mile Bluffs area or the Zimovia Highway has a huge rock fall issue from logging adjacent to the road. Turning right at the top of St. Michael's					
	Street. Cars park too close to corners (e.g., at Brueger and Lynch Street junction and at Church and St. Michael's Streets), so you can't see oncoming traffic. Intersection at St. Michael's and Church Street: can't see around parked cars.					
4)	Are there other crash locations or accident incidents involving animals or boats not shown on the map?  Yes II  No If yes, please describe location and incident. The Shoemaker Park area is a speed zone that has many deer fatalities on the					
	highway Deer on road all along 7imovia					

☐ Unsafe, unmaintained roads IIII	Missing or inadequate road signage I
□ Lack of school crossing(s) IIII	☐ Lack of helmet use on ATV, bike or motorcycle IIIII
☐ Talking on phone or texting while driving IIII II	Excessive driving speeds III
☐ Talking on phone or texting while walking II	Driving/boating while intoxicated IIIII
∑ Young drivers not knowing rules of road II	Roadwork or road damage II
□ Lack of trail marking(s) III	Pedestrian or bicycle safety IIII
□ Lack of pedestrian or bike infrastructure	□ Lack of seatbelt use IIII
Pedestrian visibility and reflectivity IIIII I	Road dust II
Lack of emergency shelters	□ Driver education II
☐ Intersection safety IIIII	Failure to use life jackets IIIII

5) Which of the following are transportation safety concerns to you? (Please check all that apply.)

- 6) What would make our roads safer? Stabilize the Bluffs. Redesign the highway S-curves. Provide a wider shoulder along Zimovia highway from mile post 6 13. Programmable, flashing school zone lights; pedestrian and bike paths; permanently mounted and mobile radar speed detectors. The rights of way are in terrible shape (e.g., First Avenue south of Evergreen Elementary is filled with huge potholes + Stikine/Evergreen Avenue from the Alaska Marine Highway Ferry Terminal to the airport also is in terrible condition). Tight and congested parking in front of the High School and along Front Street between Outer Drive and Lynch Streets. Street parking along Wrangell streets. Blind parking lot entries and exits. Increased signage and formalized crossings at trails, etc. Pedestrian or bike trail infrastructure. Better signage, crosswalks, and signals. Flags on bikes. Enlarge bike lanes; better crosswalks; and consistent snow removal. More sanding on roads.
- 7) Other areas of safety concern or comments: Mount Dewey trail repairs are needed. Texting and driving is a large concern along with driving while under the influence. Unsafe, unmaintained roads/sidewalks. Areas around schools lots of places where you can't see around parked cars to pull out.

#### Thank you for helping to make Wrangell safer!

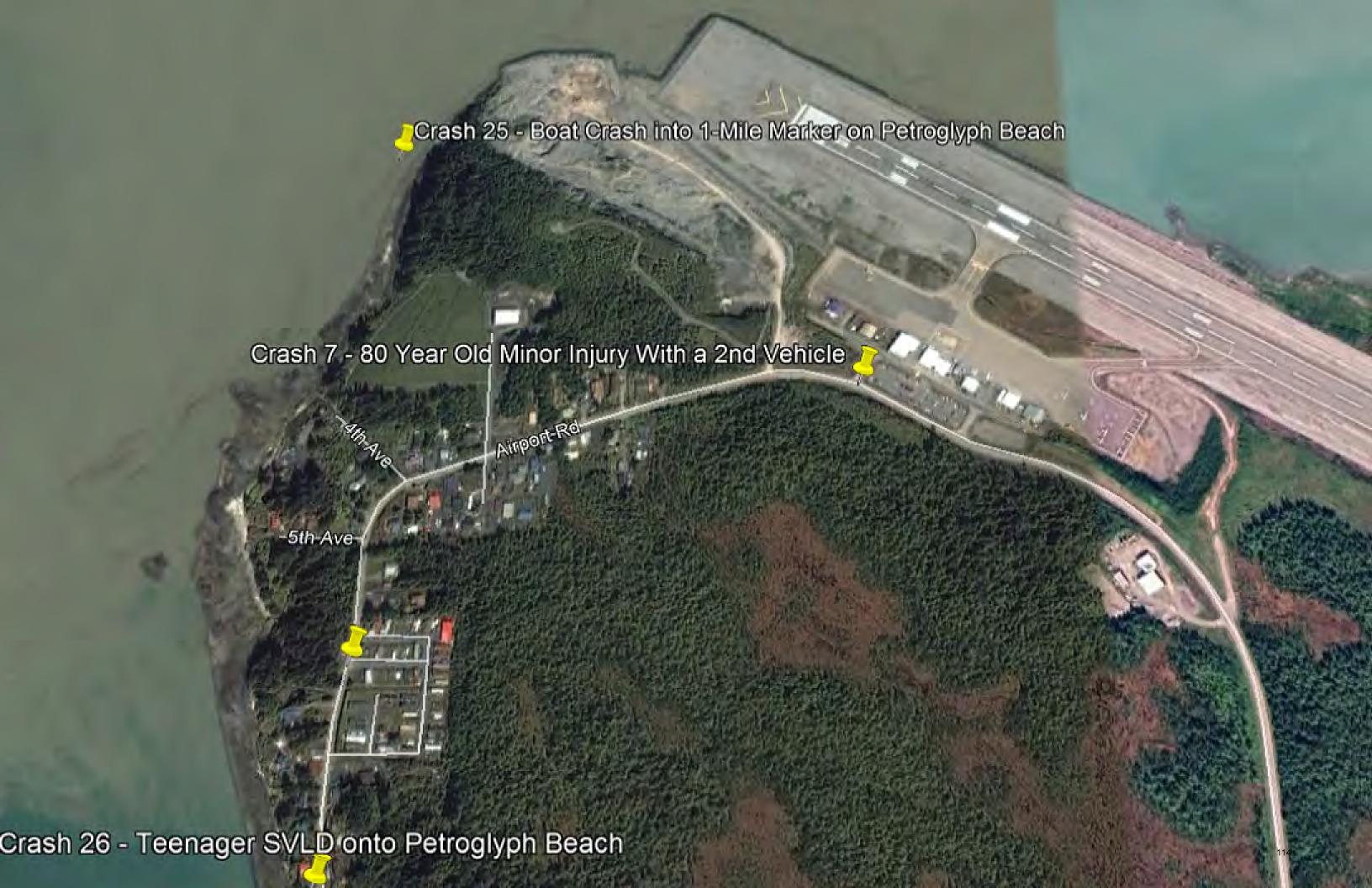
Please contact Liz Cabot, Transportation Planner, if you have questions: (907) 874-3077; email: lizcabot@wca-t.com



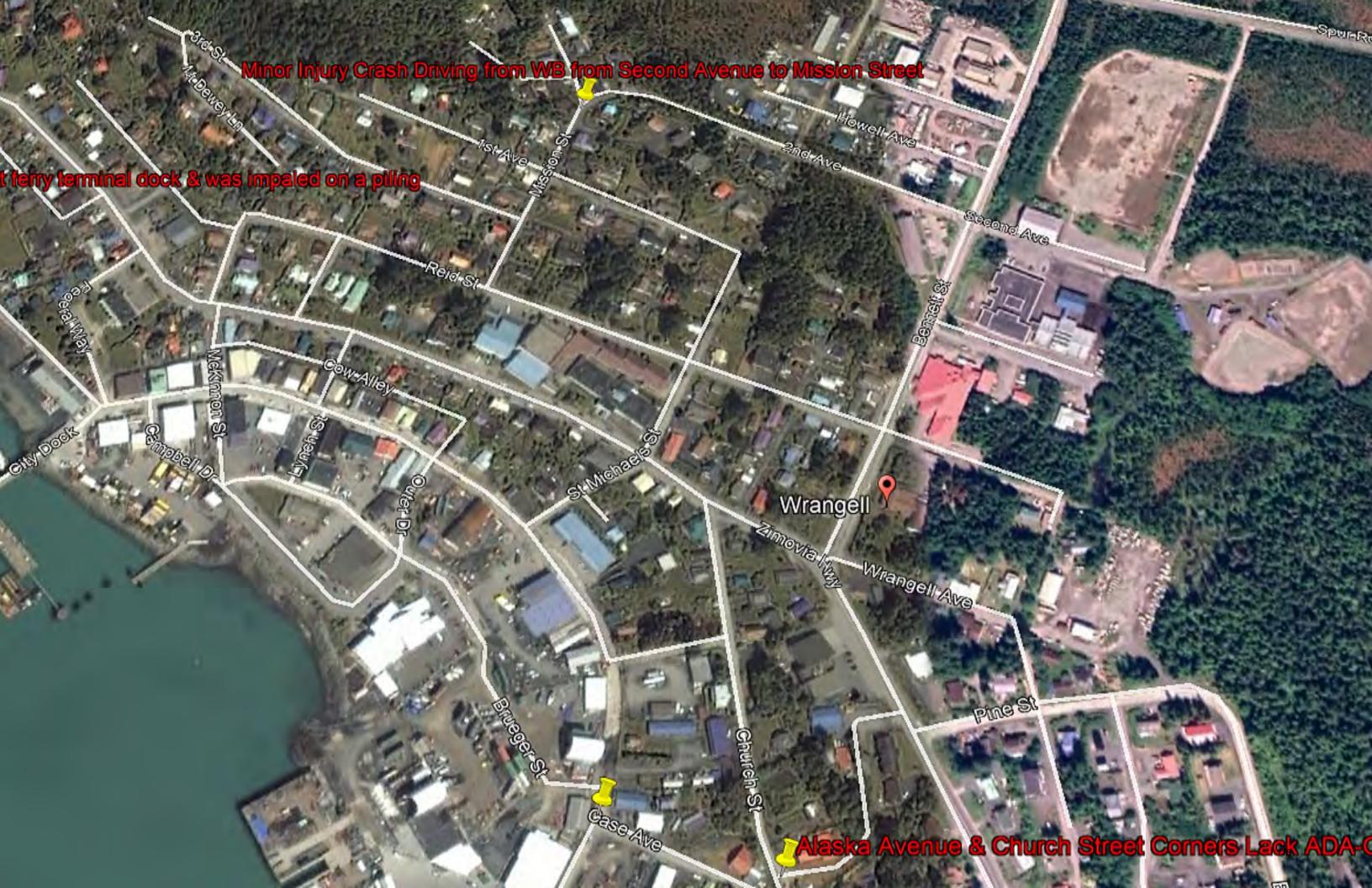
















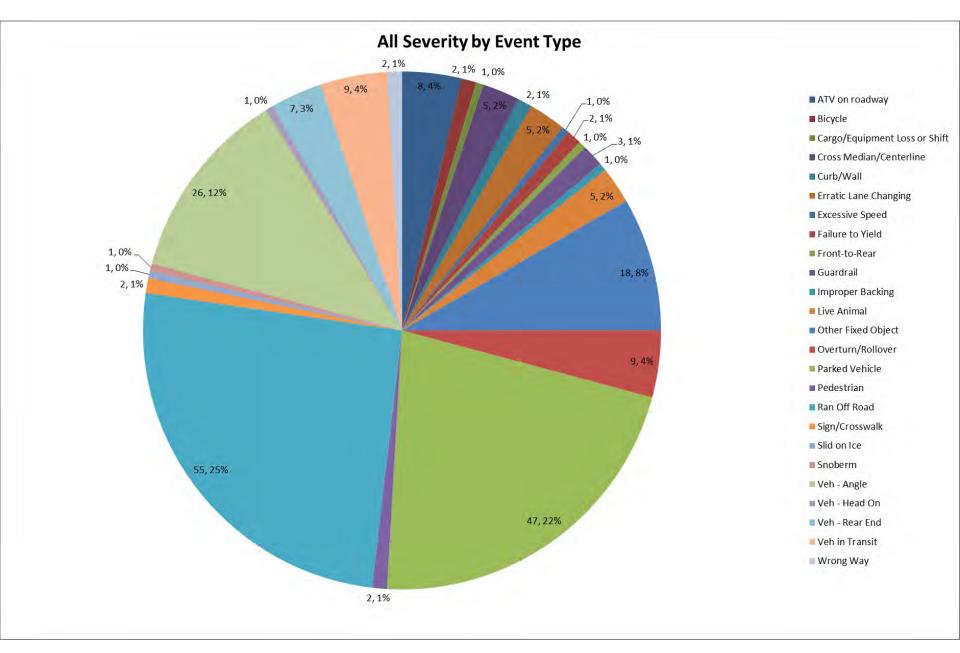
# Wrangell, Alaska Road Safety Data Analysis 1976 - 2018 Crash Data

Please Note: This is a large time period, and the user will want to keep in mind that there may have been significant changes on some roadways during this lengthy time span. Further, some data was collected anecdotally, some from Wrangell PD & the bulk from the AKDOT&PF.



## Crash Severity

Year	Fatal	Serious Injury	Minor Injury	Property Damage Only	Total
1976				1	1
1998	1				1
2000		1	1	10	12
2001				4	4
2002				1	1
2003				5	5
2004			1	5	6
2005			3		3
2006			3	2	5
2007		1	3	5	9
2008			2	5	7
2009		1	2	6	9
2010			3	2	5
2011				4	4
2012		2	2	9	13
2013			3	2	5
2014			1	2	3
2015		1	4	38	43
2016			4	46	50
2017			3	57	60
2018	1	1	1	34	37
UNK	1			1	2
Grand Total	3	7	36	239	<b>285</b> 119

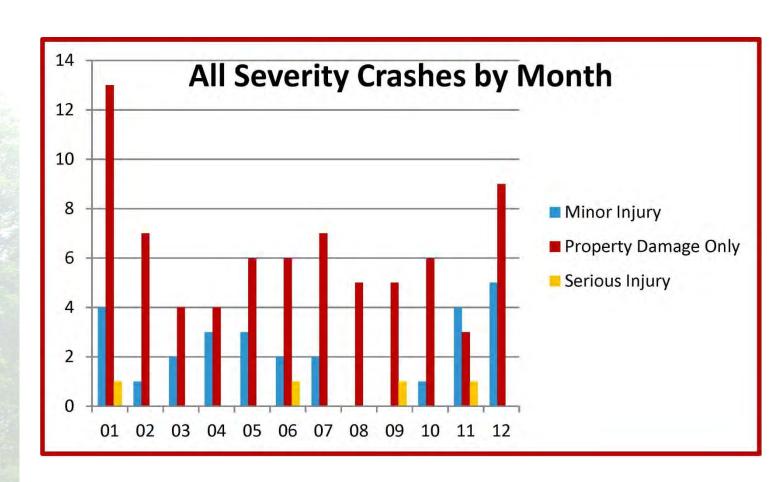




#### Location of All Severity Crashes 1976 - 2018

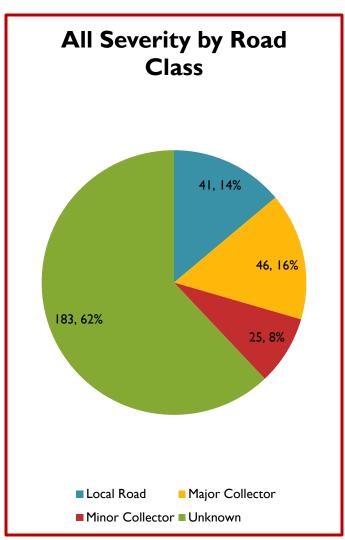
Location of All Severity Crashes 1976 - 2018						
Road Name	Fatal & Serious Injury	Minor Injury	Property Damage Only	<b>Grand Total</b>		
Airport Road		1		1		
Ash Street		1		1		
Bennett Street		1	2	3		
Berger Street			1	1		
Case Avenue		1	9	10		
Church Street/2nd Street	1	1	7	9		
Evergreen Avenue		2	1	3		
Federal Way			3	3		
Front Street		3	12	15		
Grief Street			1	1		
Ishiyama Drive		1	1	2		
Nemo Loop/FS Road			2	2		
Outer Drive			2	2		
Petroglyph Beach			1	1		
Pine Street			1	1		
Reid Street			2	2		
Second Avenue		1		1		
Shoemaker Loop Road			1	1		
Spur (Wrangell East) Road	1	2		3		
St. Michaels Street			1	1		
Stikine Avenue			4	4		
Unknown	3	6	161	170		
Wrangell Avenue	1			1		
Zimovia Highway	4	16	27	47		
Grand Total	10	36	239	<sup>12</sup> 285		

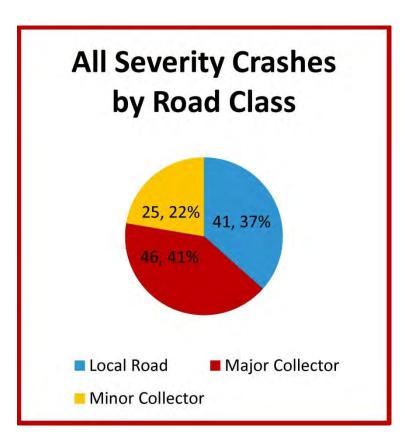
### Crashes by Month





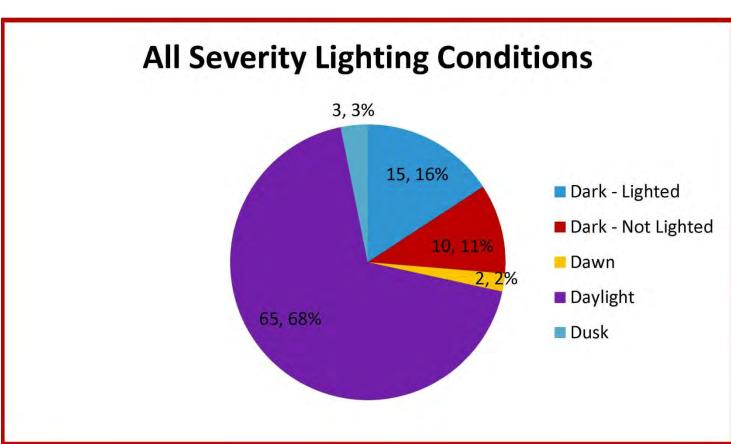
### Crashes by Road Class



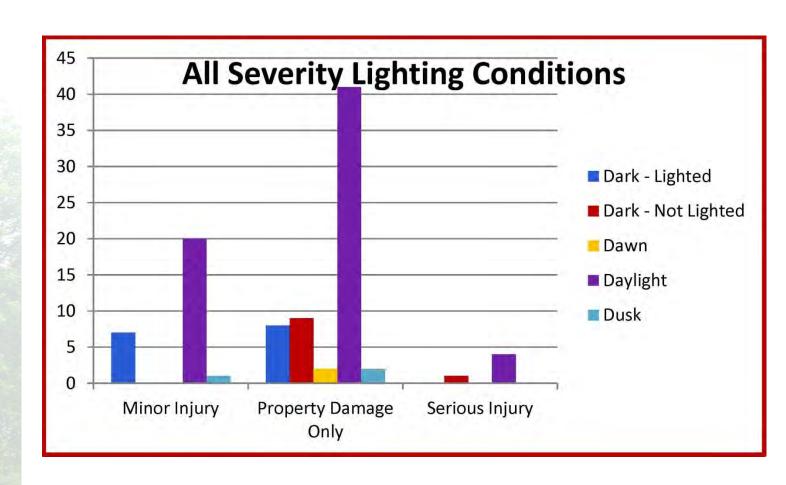




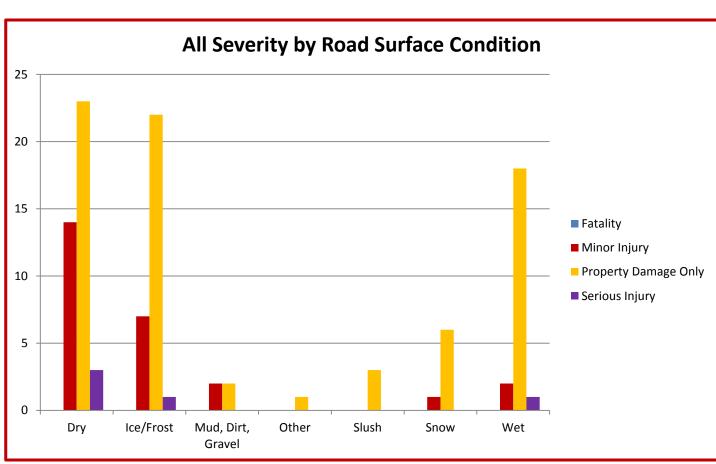
### Light Conditions



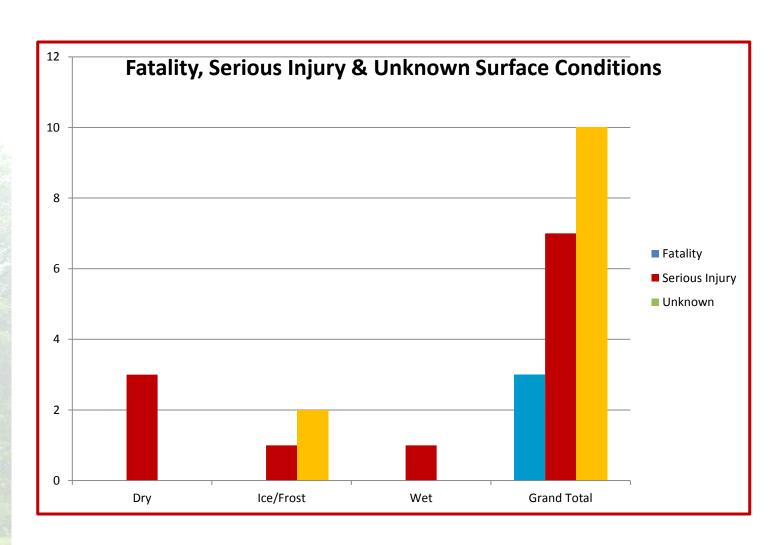
### Light Conditions



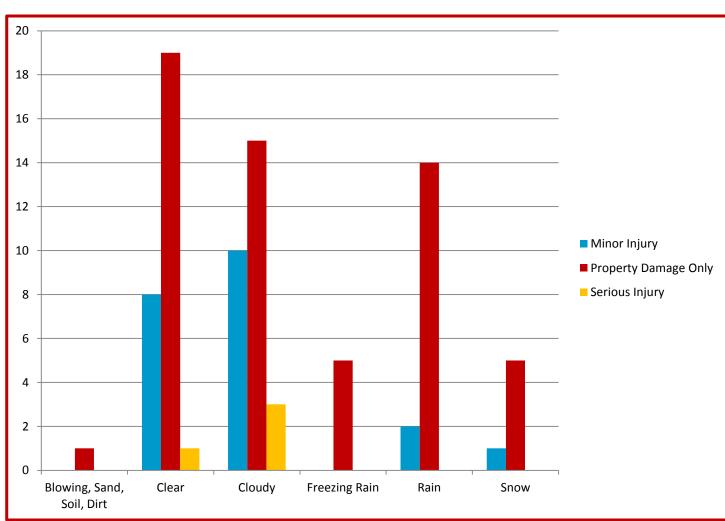
#### Road Surface Conditions



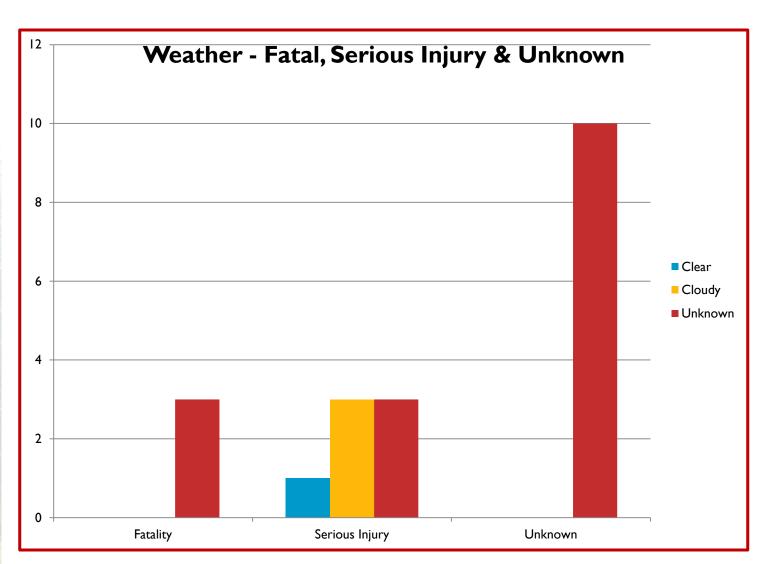
#### Road Surface Conditions



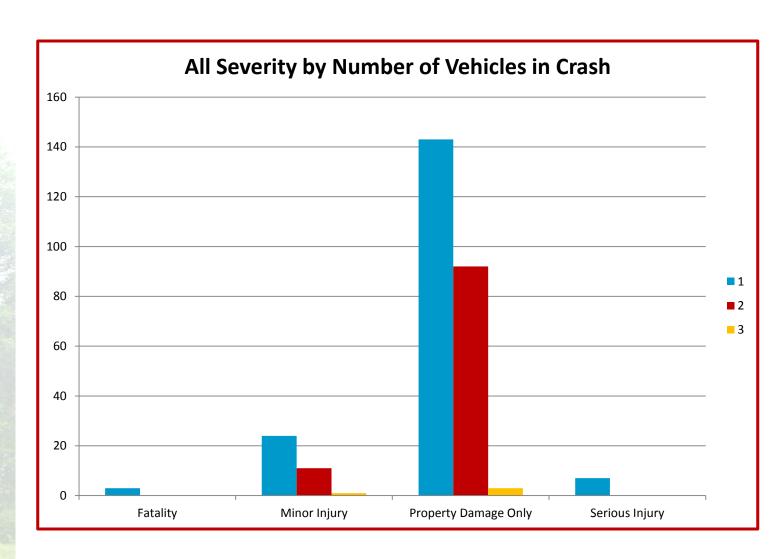
#### Weather Conditions



#### Weather Conditions

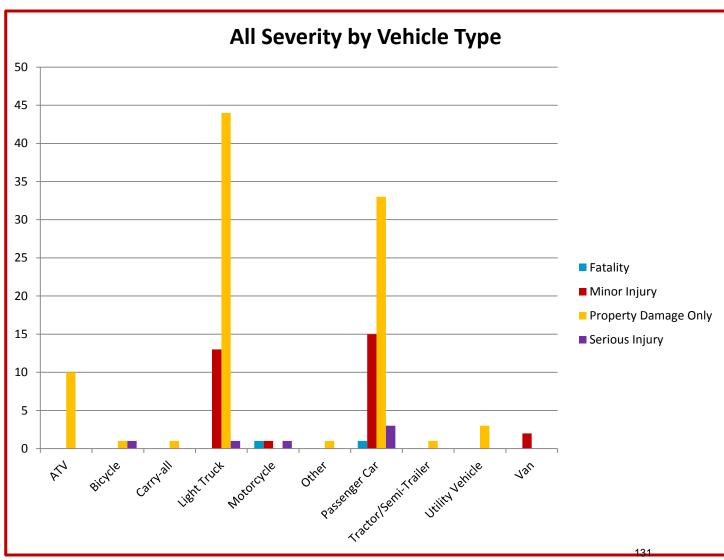


#### Number of Vehicles in Crash



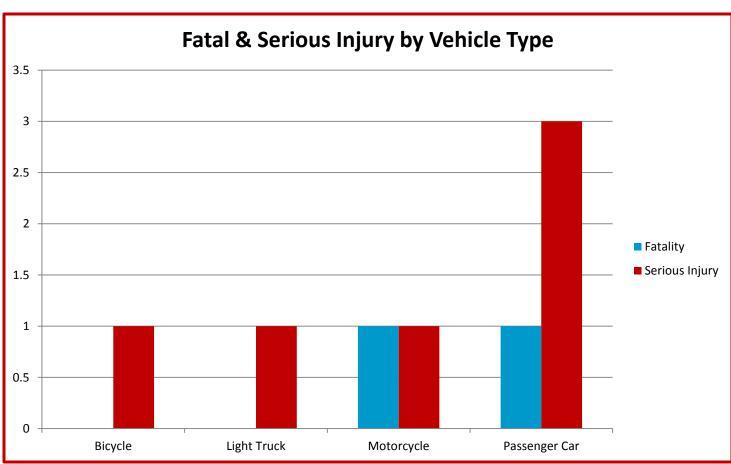


## All Severity Crashes by Vehicle Type



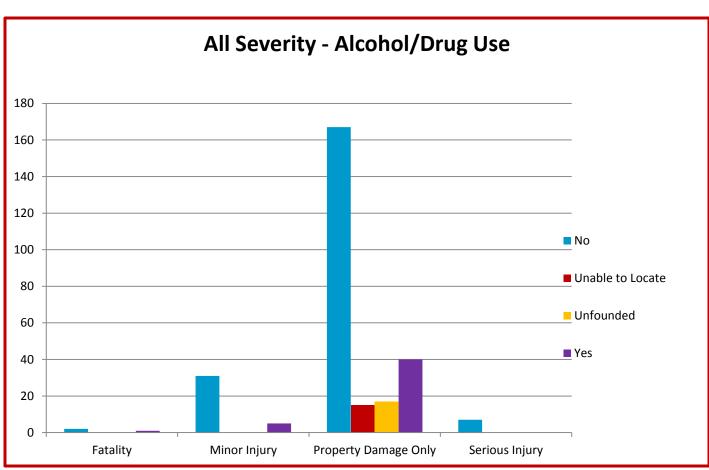


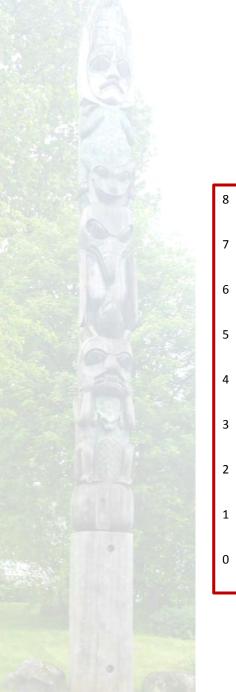
## Fatal & Serious Injury Crashes by Vehicle Type



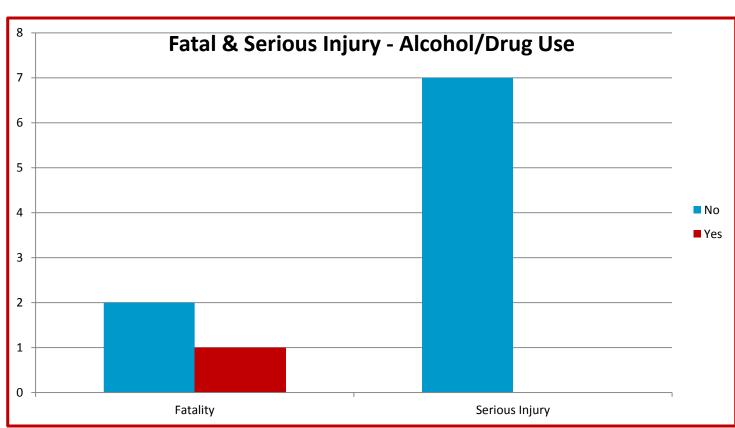


## All Severity Alcohol/ Drug Impairment Reported

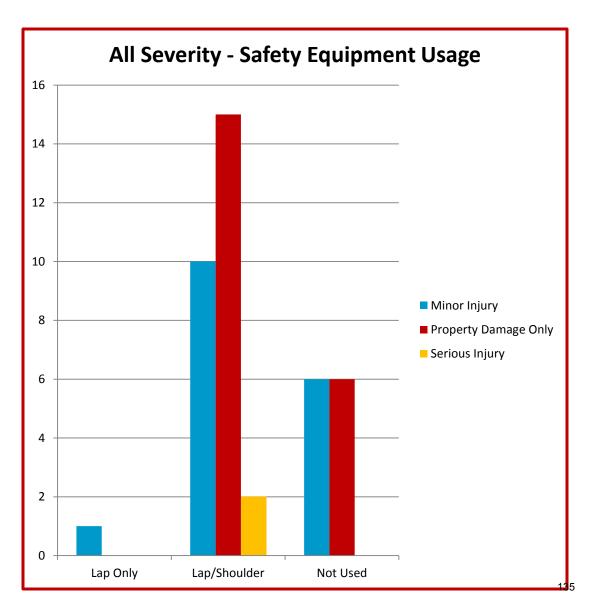




#### Fatal & Serious Injury Alcohol/ Drug Impairment Reported

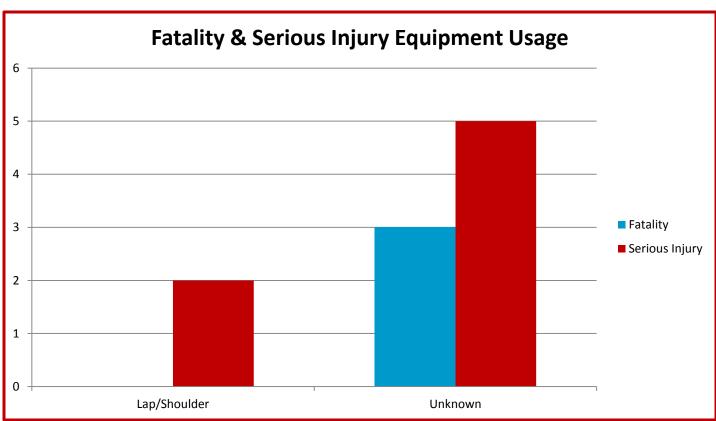


#### Lap Belt/Shoulder Harness Used

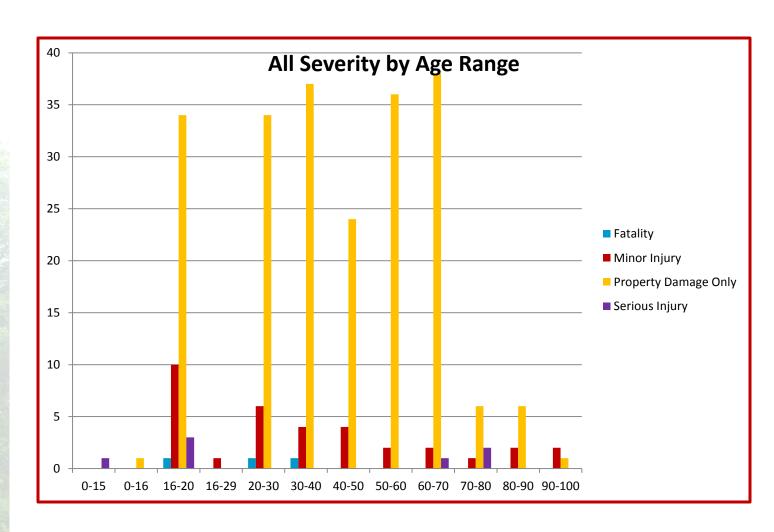




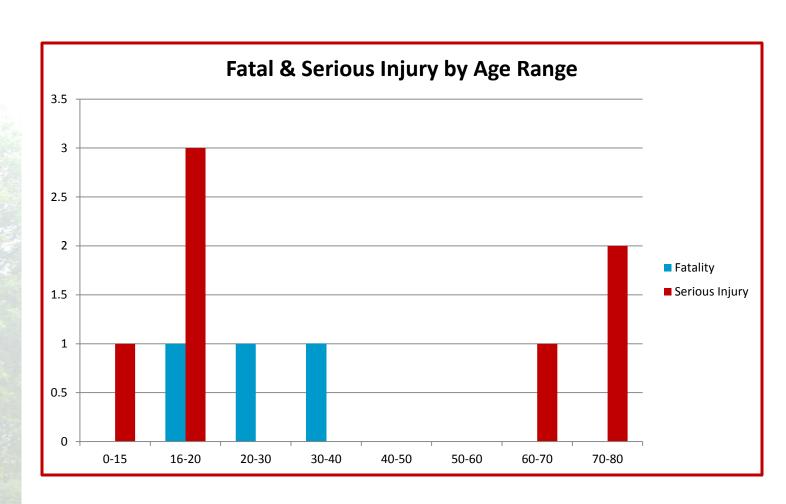
#### Fatal & Serious Injury Lap Belt/ Shoulder Harness Use



#### Driver Age – All Severity Crashes



#### Driver Age – Fatal & Serious Injury Crashes

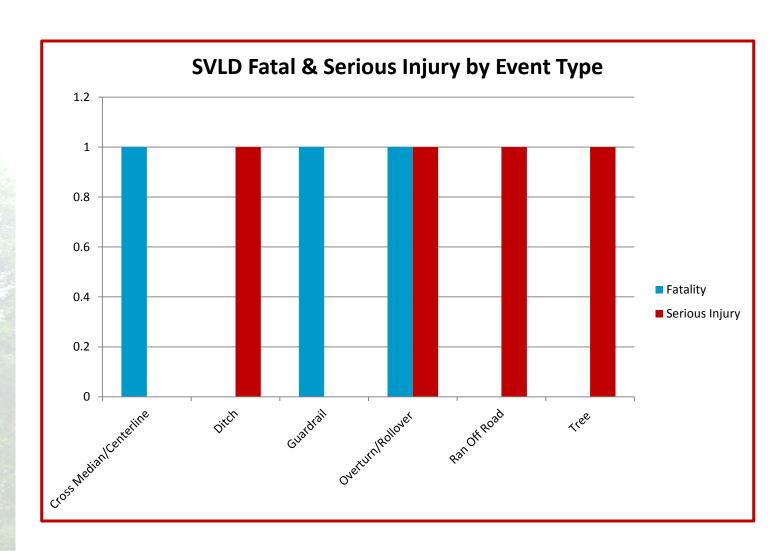




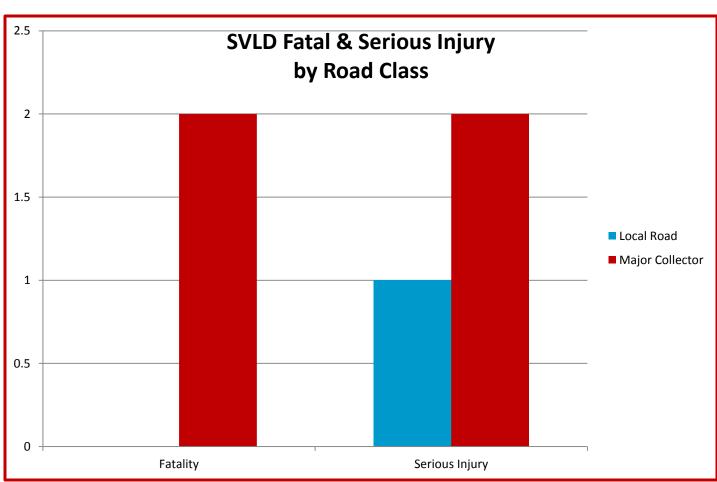
## Single Vehicle Lane Departure - Event Types

Boulder	-
Cross Median/Centerline	ŗ
Curb/Wall	2
Ditch	3
Downhill Runaway	2
Embankment	2
Erratic Lane Changing	2
Guardrail	2
Guardrail End	2
Other Fixed Object	3
Other Fixed Object/Building	2
Other Fixed Object/Fire Hydrant	2
Overturn/Rollover	g
Parking Structure	-
Ran Off Road	1
Sign/Crosswalk	2
Snoberm	1
Tree	4
Utility Pole	2
Utility Pole/Light Support	-
Veh - Head On	-
Grand Total	9

## Single Vehicle Lane Departure - Event Types



## Fatal & Serious Injury SVLDs by Road Class



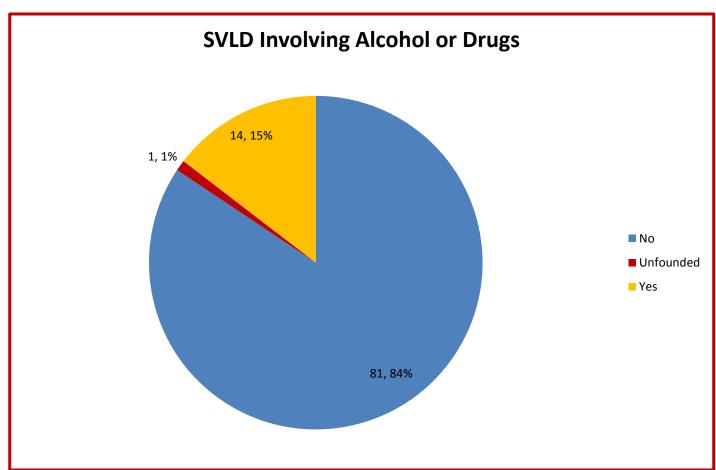


# SVLDs by Road Name

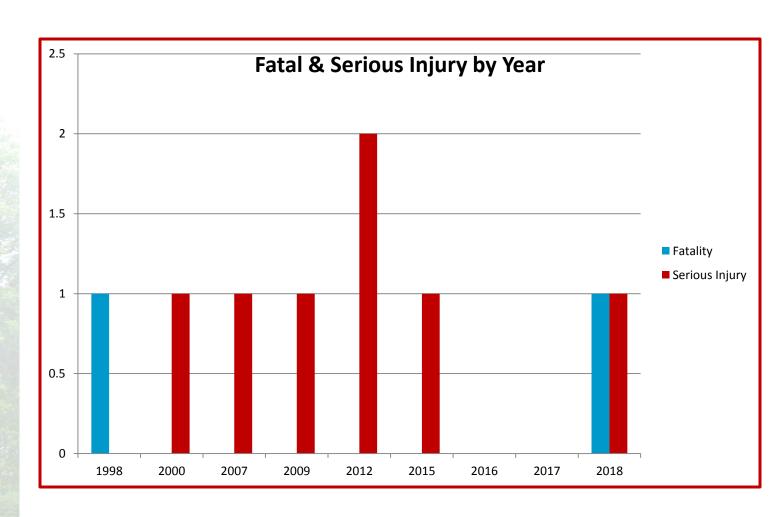
Road Name	<b>Grand Total</b>
Case Avenue	3
Church / 2nd Street	2
Front Street	4
Ishiyama Drive	1
Nemo Loop/FS Road	2
Petroglyph Beach	1
Second Avenue	1
Shoemaker Loop Road	1
Spur (Wrangell East) Road	3
Stikine Avenue	2
Unknown	43
Zimovia Highway	33
Grand Total	96



# Single Vehicle Lane Departure Crashes Alcohol/Drug Impairment Reported



## SVLDs by Year



# MEMORANDUM OF AGREEMENT BETWEEN THE \_\_\_\_\_TRIBAL GOVERNMENT AND THE CITY AND BOROUGH OF

AND THE CITY AND BOROUGH OF
I. Parties The parties to this Memorandum of Agreement (MOA) are the Tribe (hereafter referred to as "Tribe") and the City and Borough of (hereafter referred to as "City").
II. Purpose The purpose of this MOA is to develop an annual Community Streets Maintenance Plan with identified priorities for the community streets of the Tribe and City, and to establish roles and responsibilities of the City and the Tribe to address the unmet maintenance needs on both the City and Tribally-owned routes.
WHEREAS, the City and Borough of has the responsibility for the City and Borough ofowned community routes, and may not receive adequate funding through state revenue sharing or other funding sources to address the maintenance and safety needs of the community; and
<b>WHEREAS</b> , the Tribe receives funding through the Tribal Transportation Program (TTP) to conduct transportation-related activities for routes that are owned by the Tribe, and regulations allow for the TTP maintenance funding to be used for maintenance of City-owned facilities when a MOA between the entities has been executed.
<b>THEREFORE,</b> in consideration of the above premises, the parties have agreed to the following:
III. Responsibilities
Administration of Jointly-Shared MOA: All administration and operational activities shall occur when the Tribal Transportation Program Manager and the appropriate City representative have communicated and collaborated to address the ongoing maintenance needs of all community streets.
Tribal Government:
1. Maintain all community streets that are listed in the Tribal Government's National Tribal Transportation System Inventory as public and/or owned and maintained by the City and Borough of
2. Provide funding when available for year-round community streets maintenance that includes snow removal.
<ol> <li>Provide training for qualified operators through the Personnel and Planning departments.</li> <li>Provide maintenance and repair of any City equipment while in use by the Tribe maintenance staff.</li> </ol>
5. Assist the City with the development of an annual Community Streets Maintenance Plan.

#### City and Borough of :

- 1. Provide use of City-owned maintenance equipment to provide additional support to address Tribe community streets maintenance activities.
- 2. Annual participation in the mandatory public meeting process to present Tribe's Tribal Transportation Improvement Plan (TTIP) for public review and comment.
- 3. Assist the Tribe with the development of the annual Community Streets Maintenance Plan.
- 4. Provide additional funding when available for special maintenance projects or activities.
- 5. Allow access through City rights-of-ways and easements for tribal maintenance activities.

#### **IV.** General Principles

This MOA is neither a fiscal nor a financial document. Any endeavor involving reimbursement or contribution of funds between the parties hereto shall be handled in compliance with all applicable laws, regulations, and procedures.

Amendments or modifications to this MOA may be made upon written consent of all parties. This Memorandum shall remain in effect until terminated by either party, following a written notice submitted at least 30 days in advance.

This Memorandum of Agreement shall become effective on the date signed by both parties hereto.

Signed by:	
Tribal Administrator	Date
ATTEST:	
Tribal Transportation Program Manager	Date
City and Borough ofTitle:	Date
ATTEST:	
City Clerk	Date

#### TRIBAL REQUEST FOR SERVICES FROM

#### THE WESTERN FEDERAL LANDS HIGHWAY DIVISION

NOTE: Please check with the agency from which you are requesting services before using this form.

Please provide the information requested below. **Be as <u>detailed and specific</u> as possible**. Your answers will help determine whether we have the ability to meet your needs.

Name of	Project:
Location	of Project: (Please attach a map.)
S	State:
(	County/Borough/Tribal Lands:
C	GPS Coordinates: Latitude Longitude
Purpose,	Need, and Major Objectives of Project:
l	What transportation need does the existing road serve?
l	What transportation need will the new project solve?
-	
<b>.</b>	What type of vehicles will use this transportation project?
<b>.</b>	What is the population base or traffic volume that it will serve?
- V -	What is the desired season of use? (e.g. year round all weather, seasonal use only, etc.)
V	Why is this project so important?
•	

Is this project adjacent to or associated w	with other anticipated work?
Conditions: (Please attach photos.)	
What does the existing road template lo	ook like? Width, road surface type, road surface ondition, slope condition, bridge condition:
f Project: (Attach any scope defining dod	cuments.)
Starting point of project:	
Ending point of project:	
Length of project:	
tems of work anticipated: Check all that	t apply.
	• • •
☐ reconstruct new roadway	□ recondition existing roadway
	<ul><li>☐ recondition existing roadway</li><li>☐ bridges</li></ul>
<ul><li>□ reconstruct new roadway</li><li>□ spot alignment improvements</li><li>□ large culverts</li></ul>	<ul><li>□ bridges</li><li>□ fish passage culverts</li></ul>
<ul><li>□ reconstruct new roadway</li><li>□ spot alignment improvements</li></ul>	☐ bridges
<ul> <li>□ reconstruct new roadway</li> <li>□ spot alignment improvements</li> <li>□ large culverts</li> <li>□ slope stabilization</li> <li>□ repairing frost heaves/soft spots</li> <li>□ paved surface</li> </ul>	<ul><li>□ bridges</li><li>□ fish passage culverts</li><li>□ retaining walls</li></ul>
<ul> <li>□ reconstruct new roadway</li> <li>□ spot alignment improvements</li> <li>□ large culverts</li> <li>□ slope stabilization</li> <li>□ repairing frost heaves/soft spots</li> <li>□ paved surface</li> </ul> Is a current Right-of-Way or are Easeme	<ul><li>□ bridges</li><li>□ fish passage culverts</li><li>□ retaining walls</li><li>□ aggregate surface</li></ul>
<ul> <li>□ reconstruct new roadway</li> <li>□ spot alignment improvements</li> <li>□ large culverts</li> <li>□ slope stabilization</li> <li>□ repairing frost heaves/soft spots</li> <li>□ paved surface</li> </ul> Is a current Right-of-Way or are Easeme entire new project?	<ul><li>□ bridges</li><li>□ fish passage culverts</li><li>□ retaining walls</li><li>□ aggregate surface</li></ul>
□ reconstruct new roadway □ spot alignment improvements □ large culverts □ slope stabilization □ repairing frost heaves/soft spots □ paved surface  Is a current Right-of-Way or are Easeme entire new project? □ Yes □ No	<ul><li>□ bridges</li><li>□ fish passage culverts</li><li>□ retaining walls</li><li>□ aggregate surface</li></ul>

new project?		be affected when constructing the					
Where are the closest mater	ial sources and disposal sites?						
When are the typical construction months?							
rk accomplished to date either bease attach work documents. Che		own performed by others:					
☐ scoping reports	☐ conceptual studies	☐ technical reports					
☐ alternative analysis clearances	☐ environmental studies	□ environmental					
☐ construction permits clearance	□ plan sets	☐ right-of-way					
☐ utility relocation	☐ construction procurem	ent 🗆 construction					
quested development activities a leral Lands (WFLHD) to perform. (		es and objectives you want Western					
☐ scoping reports	☐ conceptual studies	☐ technical reports					
☐ alternative analysis clearances	☐ environmental studies	☐ environmental					
☐ construction permits clearance	☐ design plan sets	☐ right-of-way					
☐ utility relocation	☐ construction procurem	ent 🗆 construction					
ical delivery dates of major deliv	verables listed above:						
Major Deliverable	Critical Date	Reason for criticality					
Design plans completed							
Construction end							
Construction start							

What work will you perform: (Specify a	activities and objectives you will p	perform. Check all that apply.)
□ staff	☐ scoping reports	☐ conceptual studies
☐ technical reports	☐ alternative analysis	□ environmental
studies		
☐ environmental clearances	☐ construction permits	□ plan sets
☐ right-of-way clearance	☐ utility relocation	□ construction
procurement		
□ construction		
Current cost estimate for this project:		
Engineering:		
Construction:		
Construction Administration: _		
regulations, MOUs with regulatory ager Low Volume Local Roads Guidelines, etc		
Issues or unusual aspects of this projec	t that we need to be aware of:	
(Risks, environmental issues, public con		

#### **Funding Information:**

	the project approved through federal/state/local/tribal planning committee? (Attach pporting STIP, Tribal Transportation Improvement Program, or approval document.)
_	
W	hat specific type and amount of the funds are to be used for this work?
_	
- W	ho has the funds at the current time?
Is	there any time criteria or expiration date limit associated with the funding?
— Но	ow will you compensate WFLHD for this service (transfer funds, check, etc.)?
	Information
CC	Name:
	Phone Number:
	E-mail Address:
Αι	uthorized person to enter into agreement:
	Name:
	Phone Number:
	E-mail address:
te subn	nitted:

Attach Additional Pages for Comments or to provide more information.

Please return completed form to an FHWA Tribal Coordinator or <a href="mailto:phyllis.chun@dot.gov">phyllis.chun@dot.gov</a>, 360- 619-7922.

Form Revision August 2015

#### Section 7A.100 Rural School Area Traffic Control Summary

[This is a new section. There is no corresponding section in the MUTCD.]

#### Guidance:

- or Traffic control treatment of rural school areas should conform to Table 7A-100.
- School districts should consider providing crossing guards where students in grades K-8 (K-4 in particular) are required to cross major streets.
- On state roads, any significant deviation from the traffic control treatments shown in Table 7A-100 should be supported by written justification in accordance with procedures for Design Criteria Waiver, as outlined in Chapter 11 of the Alaska Highway Preconstruction Manual.

#### Support:

- For this application, "rural" is defined as a sparsely populated area where the majority of land is not subdivided.
- Rural schools have different traffic control than urban schools because there are generally fewer students that must walk to school. Students are usually bused or driven because these areas are more sparsely settled and homes are farther away. Placing 20 mph zones on rural high speed roads where few student pedestrians are seen by drivers would generate disrespect for school speed zones in general, thereby making all school zones less safe.

#### Section 7A.101 Urban School Area Traffic Control Summary

[This is a new section. There is no corresponding section in the MUTCD.]

#### Guidance:

- or Traffic control treatment of urban school areas should conform to Table 7A-101.
- On state roads, any significant deviation from the traffic control treatments shown in Table 7A-101 should be supported by written justification in accordance with procedures for Design Criteria Waiver, as outlined in Chapter 11 of the Alaska Highway Preconstruction Manual.

#### Table 7A-100. Rural School Area Traffic Control

Road Adjacent to School Grounds		Road Not Adjacent to School Grounds
Speed Limit	Speed Limit	
<35 mph	>40 mph	
School Area Signs (S1-1)	School Area Signs (S1-1) with a pedestrian-actuated beacon	School Area traffic control devices should not be placed on roads that do not abut school grounds unless a crossing guard is present at the site. Any exceptions to this rule shall be based on a site-specific engineering study.

## **Daylighting**

**Definition** To "daylight" an intersection is to clear sight lines between pedestrian crossings and oncoming cars, usually by creating no-parking zones at the curbs in front of crosswalks at that intersection.

#### **Benefits**

- Improves drivers' sight lines of pedestrians waiting at intersection curbs, particularly of children and people in wheelchairs who are blocked from view by parked cars
- Improves visibility between pedestrians and drivers making turns
- Improves pedestrians' sight lines of approaching cars, allowing them to make eye contact with drivers from the sidewalk

#### **Considerations**

- Decreases the amount of available curbside parking
- Removing on-street parking could increase vehicle speeds

#### **Appropriate Contexts**

- Intersections where pedestrian crashes are common
- Intersections where no sidewalk exists or sight lines are poor
- Intersections where parked vehicles next to the crosswalk block sight lines
- Intersections near schools

#### Guidance

- Install no-parking signs to mark the existence and length of no-parking zones
- Daylight at least 20' (about one parking space) from the crosswalk at the near and far side of the intersection on urban streets with 20–30 mph speed limits<sup>1</sup>
- Daylight at least 50' (about two parking spaces) in advance of crosswalks at each intersection approach on streets with 35–45 mph speed limits<sup>2</sup>
- Daylight at least 30' in advance of each signal, stop sign, or yield sign<sup>3</sup>
- Prohibit drivers from standing or parking vehicles at the curb within 20' of a crosswalk at an intersection or within 30' of any signal, stop or yield sign, or traffic-control signal<sup>4</sup>
- Evaluate impacts of daylighting by collecting crash data

#### **Professional Consensus**

Parking setbacks are included in AASHTO guidelines

#### **Examples**

- New York, NY
- Hoboken, NJ

## Wrangell Cooperative Association Tribal Safety Plan Safe Routes to School Emphasis Area

#### **Interview Questions**

As Wrangell Cooperative Association (WCA) prepares its Tribal Safety Plan, Evergreen Elementary School's Principal is uniquely qualified to provide essential information to help the consultant understand the issues that are important to the school and local community. Below are a number of questions that will give the consultant a better picture of Evergreen Elementary School's specific demographics and challenges.

#### School population

- How many students are enrolled at Evergreen Elementary School for SY17-18? 160 What grades do they represent? K-5 and one pre-K. Increase of 30 students from last year. Due to people moving in, and in flux of new students.
- How many students walk or bicycle regularly? 30-40 walkers and 13-20 cyclists. Line for walkers huge; e.g., going to the baseball field. Line up in the gym by their transportation mode. How many more walk or bike on an occasional basis? Swimming and baseball in the spring increases the walking.
- Is there anything the consultant needs to know about the dynamics of the school population? Free and reduced lunch. High poverty level and high Title 1 participation. In the past, 1/3 of the student population was Native American. Increased Native American student population.
- Are students bused to this school from other parts of the Wrangell community? Yes, busses provided. One school bus picks up a student 12 miles out on Zimovia Highway. Where do most students live with respect to the school property; i.e., how many students live within walking or biking distance? The majority live within 1-2 miles from the school campus. Paved bike path that goes south out on Zimovia Highway about five miles; e.g., middle schoolers and high schoolers. Do you have a map of the school zone boundaries, and/or a map of the walk zone that you can provide electronically to the consultant? Middle and High School is two blocks away.

#### Policies and plans

- Are there any policies that the consultant needs to know about? No. Are children allowed to bicycle to school? Yes. Is there a certain road they are not allowed to cross? No.
- Does your school hold a Walk/Bike to School Day event? No. Interested in learning more. Have talked about getting the 5<sup>th</sup> graders involved more.
- Is this school slated to undergo any type of major reconstruction/renovation project in the near future that might change or improve the parking and circulation pattern on the school grounds? No. Focus on the parking lot and the roadway. Parking lot just graded two days ago. Improved parking lot potholes. Kids travel through the woods from Native Housing to the campus. One near miss with a student popping out of the woods. City and Borough threatening to cut school budget significantly. Discussion of elementary's two parking lots. Ice melt has sidewalk erosion and rutted contributing to students and residents falling.

#### Drop-off and pick-up

- What is the span of time in which children arrive in the morning? 8-8:20a. School starts at 8:30a. Breakfast starts at 8:00a.
- What is the span of time in which children depart? Dismissal at 2:40p. At the beginning of the year, it was awful. Dangerous to dismiss everyone at the same time into congested parking area. Walkers leave first in a single file. Crossing Guard leads the students to the school crossing. Once the walkers are gone, she will leave her position. About five minutes. After the walkers go, the teachers walk the students to the bus. Parent pick-up is supervised by two teachers who give the students to the parents at a special door. Parents line up along the side of the building. Is there a departure procedure, i.e. are children who ride buses dismissed first, then walkers, then children being picked up by private vehicles?
- Where can children access the school at different times of day (drop-off, pick-up, mid-day)? In other words, are doors locked at different times of the day? Secretary's door for the Front Office, District Office, playground door stays open all day until busses have gone. Three doors onto the playground remain unlocked. One door in the breezeway that connects two buildings. Locked at 8:30a, but open until then. Don't want parents wandering in.

### Wrangell Cooperative Association Tribal Safety Plan Safe Routes to School Emphasis Area

#### **Interview Questions**

#### Safety

- What are your concerns regarding student safety with respect to traffic? Mentioned to Advisory Committee. Making sure Crossing Guard gets in place on time. Have there been parent complaints on this issue? Have there been any serious pedestrian injuries or fatalities in recent years about which we should be aware? Uneven sidewalk infrastructure caused a student to fall and scrape their knees. Are you aware of any "near-misses" that will not be captured by crash data? Due to several near misses, lectured students and parents not to cut through the woods and through the hospital parking lot.
- Are you aware of any pedestrian or bicycle safety lessons that are taught at the school, either during P.E., or in the classroom? No. Used to have Bike Rodeos, and it was very successful. Who teaches these classes?
- Do you have a Student Safety Patrol at the school (i.e. student volunteers who might stand outside the school and facilitate pick-up and drop-off)? No.

#### Other

- Are there any other issues that the consultant should know about that might affect Evergreen Elementary School's ability to encourage students to walk or bike to school?
- Are the parents or PTA involved at the school? No. Want to develop. Parent Advisory Committee
- Are there common school walking/biking routes/roadways students use to get to school?

The consultant will need photographs of the students for the Tribal Safety Plan Meeting PowerPoint, as well as for the Safety Plan itself. The consultant will try to take photos from a distance or from behind, so that viewers can not identify the children who are in the photos. If useful photos in which the children are readily identifiable are acquired, the consultant will seek permission to utilize those photos. Please be sure to inform school staff, parents, and students that the consultant is authorized to be on site taking photos.

## Drop Off/Pick Up

2015-2016



Imagine Prep @ Surprise 14850 N 156th Avenue Surprise, AZ 85379

Phone: 623-344-1770 Fax: 623-344-1780 www.surpriseprep.com

### Student Pick up Map 7th Grade @ 3:45 (Wed. 1:45) EXIT 8th Grade @ 4:00 (Wed. 2:00) 9th Grade @ 4:00 (Wed.2:00) L1th & 12th Grade @2:45 (Wed. 1:08) loth Grade @ 4:00 (Wed. 2:00) 5th Grade @ 3:45 (Wed. 1:45) West Custer Lane Please DO NOT use the parking lot to drop off or pick up AM Drop off for all students is on the South side of the building. 156th Avenue

#### DO NOT MAKE A LEFT TURN INTO THE SCHOOL PICK UP LANE

#### **Arrival**

All students should be dropped off at the South end of the building. Students must enter through the bistro in the morning (the bistro doors open at 7:00 am).

#### Dismissal

6th-North Parking Lot (front of school) @ 3:45 pm

7th– West side of the school @ 3:45 pm

8th– West side of the school @ 4:00 pm

9th-South side of the school @ 4:00 pm

10th- North Parking Lot (front of school) @ 4:00 pm

11th & 12th- Front of School @ 2:44 pm

For safety reasons do not drop off or pick up students outside of designated areas.

It is recommended that you arrive 5 minutes after your student is scheduled to be dismissed. If you arrive too early you may be asked to circle around.

#### Mon., Tues., Thurs. & Fri:

- 7:50 am—Zero Hour begins (11th-12th grade)
- **8:00 am** Computer Lab Opens—Room 315
- 8:50 am 6th-10th grade classes begin
- **2:44 pm** 11th-12th grade dismissed
- **3:45 pm** 6th-7th grade dismissed
- **4:00 pm** 8th-10th grade dismissed

#### Wed. Early Release:

- 7:50 am—Zero Hour begins (11th-12th Grades)
- **8:50** am—6th-10th Grade classes begin
- **1:08 pm**—11th-12th grade dismissed
- 1:45 pm—6th-7th grade dismissed
- **2:00 pm**—8th-10th grade dismissed

# 3.0 Alaska's Plan for Improving Highway Safety

#### ■ 3.1 Framework of the Plan

The authors of the *Alaska Strategic Highway Safety Plan* share a common goal to **reduce the rate of fatalities and major injuries by one-third over the next 10 years**. This is an aggressive goal that will require bold action. They debated whether to include a vision that seemed attainable during the life of the plan or one that truly captured their hope for the people and visitors of Alaska. This was a difficult decision as there are multiple factors involved in every crash: human behavior being the most difficult factor to predict or control. They opted, however, for an optimistic vision committing to the idea that any loss of life or injury sustained due to a traffic crash is an unacceptable and for the most part avoidable tragedy. Their vision is: **Everyone Counts: zero deaths and injuries on Alaska's surface transportation system.** 

Great care was taken to determine how that vision could be achieved. The authors wanted the mission statement to reflect how they intended to pursue that vision. They agreed that it would take strong leadership, targeting resources at the areas with the greatest opportunity for improvement, and a combination of strategies spanning all safety-related disciplines. They agreed on a mission to **improve the safety of everyone through a proactive leadership structure and to focus resources on the most effective solutions using evidence-based engineering, enforcement, education, and emergency response initiatives.** 

With this vision, mission, and goal in mind, the Leadership and Working Groups identified emphasis areas and formed the Emphasis Area Teams which evaluated and selected strategies for reducing fatalities and major injuries in Alaska.

### **3.2 Emphasis Areas**

Three primary references were used to select the emphasis areas: data analysis and review (see Section 1.0 for the problem identification); discussion among the planning participants; and review of the AASHTO SHSP. The three primary emphasis areas are driver behavior, special users of the transportation system, and highways. Each emphasis area addresses multiple problems areas, including:

- 1. **Driver Behavior** Crashes involving impaired driving, speed and aggressive driving, young drivers, and unlicensed/suspended/revoked drivers;
- 2. **Special Users of the Transportation System** Crashes involving pedestrians, motorcyclists, and bicyclists; and
- 3. **Highways** Lane departure crashes, crashes at intersections, and crashes involving moose.

Two additional issues were discussed in great detail, although not designated as separate emphasis areas: 1) data; and 2) OHVs. Data was recognized as an imperative tool for identifying, analyzing, and mitigating crash problems. Issues regarding the availability, timeliness, accuracy, and completeness of crash data span all the problem areas. At the inception of this planning process, several stakeholders already were involved in the ATRCC. Participants agreed that efforts to address data issues should not be duplicated. Additionally, the goal of the ATRCC was directly related to that of the SHSP: to improve motor vehicle crash data in order to reduce crashes and injuries on Alaska's roadways. During the spring of 2007, the State participated in a Traffic Records Assessment, and the ATRCC prepared the State's first application for the 23 U.S.C. 408 State Traffic Safety Information System Improvement Grant. The application contains the State's 2000 Strategic Plan for Traffic Records (and related Assessment Report); the 2007 plan update; goals- and performance-based measures for improving traffic records; and other information required for the application. The application requests funding for five projects voted on by the ATRCC. These projects, or strategies for improving traffic records in Alaska, include:

- SEARHC Youth First Responders The Youth First Responders is a pilot program for students ages 14 to 18 who are learning about health careers by training to earn their Emergency Trauma Technician and Emergency Medical Technician certificates. Students are trained in preparation of Patient Care Report forms. When they ride along on the ambulance, a Patient Care Report form is prepared for each call. These data will be submitted to the State EMS Office, a member of the ATRCC, through its web-based EMS data collection system. EMS personnel enter patient care information into a run report which will be collected and transmitted to the State Section of Injury Prevention and EMS. These data are part of the Alaska Trauma Registry and the FARS.
- Uniform Citation Table An enhanced, centrally administered Alaska Uniform Table of Offenses (AUTO) would contain all traffic and criminal offenses defined in statutes, regulations, and local ordinances, including important attributes agreed upon by the agencies that create, process, and use traffic and criminal record data. AUTO would be updated as soon as changes in law are known. Subscribing agencies would be able to immediately and automatically update their own databases each time the centrally managed table is changed. All agencies capturing and exchanging data about traffic and criminal offenses would validate offenses against the same table. Agencies' internal offense tables would contain all attributes agreed upon as necessary to maintain complete and accurate traffic records, such as offense effective date ranges.

Source	Program	Description	Eli	gible Project Types	Requirements	Administration
Federal	National Highway Performance Program (NHPP)	The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a state's assessment management plan for the NHS.	•	Bicycle transportation and pedestrian walkways	NHPP projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with metropolitan and statewide planning requirements.	In general, obligated through competitive local or statewide grant programs
					Funding: Generally, 80% Federal/20% matching	
Federal	Surface Transportation Block Grant Program (STBGP)	The Surface Transportation Block Grant Program provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any federal-aid highway, bridge, and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects; including intercity bus terminals.	•	Recreational trails projects Bicycle transportation and pedestrian walkways Most transportation enhancement eligibilities	Projects must be identified in the STIP/TTIP and they must be consistent with the Long-Range Statewide Transportation Plan and the tribe's Long-Range Transportation Plan.  Funding: Generally, 80% Federal/20% matching	In general, obligated through competitive local or statewide grant programs
Federal	Federal Lands Program (FLP) - Access and Transportation Programs	The FLP funds projects that improve access to or transportation within the federal estate (e.g., national forests, national parks, national wildlife refuges, national recreation areas, and other federal public lands). Alaska does not have a firm date for the next request for proposals under the Access Program, but another request is anticipated in 2019.	•	Program administration, transportation planning, research, preventive maintenance, engineering, rehabilitation, restoration, construction, and reconstruction of federal lands transportation facilities, and provision for pedestrians and bicycles.	Project must be within, adjacent to, or provide access to federal lands.  Funding: 100% Federal	In general, projects are selected by Federal Land Management Agency or statewide committee
Federal	Highway Safety Improvement Program (HSIP)	The Highway Safety Improvement Program is a Federal Highway Administration (FHWA) program that funds highway safety projects aimed at reducing highway fatalities and serious injuries.	•	Bike lanes, bike parking, crosswalks, and signage	Bicycle safety must be included in State's Strategic Highway Safety Plan (SHSP).  Funding: 90% Federal/10% matching	In general, obligated through competitive local or statewide grant programs

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal - Bureau of Indian Affairs	Indian Highway Safety Program (IHSP)	The BIA, through its IHSP, will make funds available to federally recognized Indian tribes on an annual basis for implementing traffic safety programs and projects that are designed to reduce the number of traffic crashes, death, injuries and property damage within Indian country.	Highway safety program areas identified as priority program areas eligible for funding on tribal lands:  a. Impaired driving b. Occupant protection c. Traffic records  Other fundable program areas may be considered based upon well documented problem identification from the tribes.	Any program or project request must be designed to reduce the number of motor vehicle traffic crashes and their resulting fatalities, injuries, and property damage on Indian reservations and within Indian communities.  Grant funds awarded to tribes as a result of this announcement are reimbursed for eligible costs.	In general, obligated through a competitive nationwide grant programs administered by the BIA's IHSP.
Federal	Transportation Alternatives Program (TAP) - AKDOT&PF indicated that these grants likely will be published in November 2018.	The FAST Act makes the <u>Transportation</u> <u>Alternatives Program</u> a set-aside within the Surface Transportation Block Grant Program to provide for a variety of alternative transportation projects. The TAP replaces the funding from pre-MAP-21 programs; including Transportation Enhancements, Recreational Trails, Safe Routes to School, and several other discretionary programs.	<ul> <li>Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation</li> <li>Infrastructure-related projects and systems that will provide safe routes for non-drivers; including children, older adults, and individuals with disabilities, so they may access daily needs.</li> <li>Conversion and use of abandoned railroad corridors for trails for pedestrians, bicyclists, or other non-motorized transportation users.</li> <li>Recreational Trails Program</li> <li>Safe Routes to School program</li> </ul>	Funding: 100% Federal  Funding: Generally, 80%  Federal/20% matching	In general, obligated through competitive local or statewide grant programs and administered by AKDOT&PF's Small Federal Programs Manager, Marcheta Moulton: marcheta. moulton@alaska .gov (907) 465-8769

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal	Federal Highway Safety (Section 402) Grant Program	Highway Safety Funds are used to support state and community programs to reduce deaths and injuries on the highways.	Conducting data analyses,     developing safety education     programs, purchasing child     passenger safety restraints, and     conducting community-wide     pedestrian safety campaigns.     Funds can also be used for some     limited safety-related     engineering projects.		Program administered through the Governor's Office of Highway Safety
Federal	Tribal Transportation Program Safety Funds (TTPSF)	The intent of the TTPSF is to prevent and reduce deaths or serious injuries in transportation related crashes on tribal lands where statistics are consistently higher than the rest of the Nation as a whole.  Successful TTPSF projects leverage resources, encourage partnership, and have the data to support the applicant's approach in addressing the prevention and reduction of death or serious injuries in transportation-related crashes.	For information regarding eligible activities under HSIP, please see FHWA guidance at:  https://www.federalregister.gov/documents/2017/09/21/2017-20111/notice-of-funding-opportunity-for-tribal-transportation-program-safety-funds  http://safety.fhwa.dot.gov/legislationandpolicy/fast/guidance.cfm  http://safety.fhwa.dot.gov/hsip/rulemaking/docs/hsip_ig42216_final.pdf	The FHWA will use the following criteria in the evaluation of safety plan, data assessment, or infrastructure funding requests: (1) Inclusion of the project or activity in a completed state SHSP or tribal transportation safety plan, or inclusion of the activity in a completed road safety audit, engineering study, impact assessment or other engineering document; (2) submission of supporting data that demonstrates the need for the project; (3) ownership of the facility, if applicable; (4) time elapsed since the Tribe has last received funding for a TTPSF engineering improvement project, if applicable; and (5) the project is part of a comprehensive approach to safety which includes "other safety efforts."	Program administered through the FHWA's Tribal Transportation Program Safety Engineer and Safety Program Manager. Adam.Larsen@ dot.gov 360-619-7751

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal	Bureau of Indian Affairs - Office of Justice Services Indian Highway Safety Program Lifesavers Grant Application	The BIA IHSP may offer a limited number of grants to federally recognized tribes to cover registration fees and travel expenses for attendance to the Lifesavers National Conference. If your tribe is awarded a grant, the tribe will be reimbursed for actual registration fees and travel expense upon completion.	Personnel actively working in these fields are eligible to attend:  • Adult and/or Child occupant protection programs  • Tribal Criminal Justice  • Tribal Law Enforcement  • Tribal Injury Prevention Programs  • Tribal Traffic Safety Planning Programs	This application is intended for tribal personnel who are not currently funded by the Bureau of Indian (BIA) Indian Highway Safety Program (IHSP).	In general, obligated through a competitive nationwide grant program administered by BIA - Office of Justice Services - IHSP
Federal	Community Development Block Grants (CDBG)	The Community Development Block Grant program is a flexible program that provides communities with resources to address a wide range of unique community development means. The website for Wrangell's CDBG information is: <a href="http://www.wrangell.com/economicdevelopment/community-development-block-grant-cdbg-2018">http://www.wrangell.com/economicdevelopment/community-development-block-grant-cdbg-2018</a> , and the 2018 grants are due due in Fairbanks by December 7, 2018.	<ul> <li>Public facilities and improvements (road and street improvements)</li> <li>Planning and capacity building (transportation plans)</li> </ul>		Submit an annual regional account application to the Alaska Department of Commerce, Community and Economic Development
Federal	Indian Community Development Block Grants (ICDBG)	The purpose of the ICDBG program is the development of viable Indian and Alaska Native communities, including the creation of decent housing, suitable living environments, and economic opportunities primarily for persons with low and moderate incomes. See the ICDBG regulation of 24 CFR 1003, the full text of which is available at the Electronic Code of Federal Regulations.  The current amount of available funding is not known and is contingent on future Congressional action.	A complete description of activities that are eligible for ICDBG funding can be found at 24 CFR Part 1003, subpart C. Such activities include:  • new housing construction  • housing rehabilitation  • housing infrastructure  • land acquisition to support new housing  • homeownership assistance  • public facilities and improvements including infrastructure; e.g., storm water drainage and roadway projects  • economic development and microenterprise programs.	This program does not require an applicant to leverage resources through cost sharing or matching.  If you leverage this grant with other funds you may receive points depending on the amount leveraged and support documentation provided.	In general, obligated through competitive regional grant programs administered by the Alaska ONAP in Anchorage (907) 677-9836.

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal	Recreational Trails Program (RTP) - New grant application round will be published July 15, 2018.	The RTP's purpose is to develop and maintain recreational trails and trail-related facilities in Alaska for both non-motorized and motorized recreational trail uses.  Non-motorized trail projects may apply for up to \$50,000, while motorized projects may apply for up to \$100,000.	<ul> <li>Permissible uses:</li> <li>Trail Development,         Maintenance, Acquisition and         Assessment</li> <li>Safety, Signing, and Education         Projects</li> <li>Allowable Labor Costs</li> </ul>	Reimbursable grant funds are available for recreational trail development and repair, and environmental protection and safety/education programs relating to recreational trail use (please refer to specific definition in Part A of an eligible Safety/Education project).  Funding: Generally, 80% Federal/20% matching	In general, obligated through competitive local and statewide grant programs administered by the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation.
Federal	National Park Service (NPS) Rivers, Trails, and Conservation Assistance (RTCA) Program	The Rivers, Trails, and Conservation Assistance Program provides NPS technical assistance with projects having specific goals and results for conservation and recreation expected in the near future.	<ul> <li>Defining project vision and goals</li> <li>Identifying and analyzing issues and opportunities</li> <li>Assessing and engaging partners and stakeholders</li> <li>Inventory and mapping of community resources</li> <li>Priority setting, consensus building, and funding source identification</li> <li>Organizational development</li> <li>Designing community outreach and participation strategies</li> <li>Trail, park, open space, greenway, waterway planning; including option analysis, safety issue review, and engaging partners to create outdoor and conservation recreation programs.</li> </ul>	RTCA applications are competitively evaluated based on the following criteria: 1) Project has specific goals and results for conservation and recreation expected in the near future; 2) Roles and contributions of project partners are substantive and well-defined; 3) Evidence of broad community support for the project; 4) The NPS' role is clear and supports NPS' mission; and 5) The project advances one or more key NPS strategic objectives.	In general, obligated through the regional NPS Rivers, Trails, and Conservation Assistance program office in Anchorage: Lisa Holzapfel, Program Manager lisa_holzapfel at nps.gov (907) 644-3586

Source	Program	Description	Eligible Project Types	Requirements	Administration
Federal	Land and Water Conservation Fund (LWCF)	The Land and Water Conservation Act established a grant fund to assist state and federal agencies in meeting present and future outdoor recreation needs. The Act:  1) provides funds for land acquisition for recreation on federal fish and wildlife areas, national parks, national forests, recreation areas, and for the operation/development of national parks; and 2) authorizes federal assistance to states for planning, acquisition, and development of outdoor recreation facilities through a grants program. In turn, the states may transfer the funds to local political subdivisions to acquire land or develop outdoor recreation facilities.	Qualifying projects include development and/or acquisition of outdoor facilities for the purpose of public recreation. Eligible projects will include all required documentation.	The Land and Water Conservation Fund provides 50% reimbursement to selected outdoor recreation projects that are sponsored by political subdivisions and other appropriate public agencies.	In general, obligated through competitive local and statewide grant programs administered by the Alaska Department of Natural Resources, Division of Parks and Outdoor Recreation: LWCF Grants Administrator, jean.ayers@ alaska.gov or (907) 269-8694.
Federal	Assistance to Firefighters Grant Program (AFG)	<ul> <li>AFG goal is to meet the firefighting and emergency response needs of fire departments and nonaffiliated emergency medical service organizations; e.g.,</li> <li>enhance a fire department's/safety organization's ability to protect the health and safety of firefighters and the public.</li> <li>assist fire prevention programs and support firefighter health and safety research and development.</li> <li>increase or maintain the number of trained "front line" firefighters available in communities.</li> <li>The FY18 grant round opened September 24, 2018 and closed on October 26, 2018.</li> </ul>	AFG helps firefighters and other First Responders to obtain critically needed equipment, protective gear, emergency vehicles, training, and other resources needed to protect the public and emergency personnel from fire and related hazards.  The grants will fund what FEMA calls "bunker gear" (aka firefighter safety suits), the upgrade of which is a high priority project.	Career and volunteer fire departments and other eligible organizations may apply for AFG grants. Since the City and Borough of Wrangell administers the Fire Department, the City and Borough would need to submit the application.	In general, obligated through a competitive nationwide grant program administered by Federal Emergency Management Agency. Richard Dunne (312)408-5556

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal	Staffing for Adequate Fire and Emergency Response Grants (SAFER)	SAFER provides funding directly to fire departments and volunteer firefighter interest organizations to help them increase or maintain the number of trained, "front line" firefighters available in their communities. SAFER's goal is to enhance the local fire departments' abilities to comply with staffing, response and operational standards established by the NFPA (NFPA 1710 and/or NFPA 1720).	SAFER is a competitive/discretionary grant program comprised of two categories: 1) Hiring of Firefighters; and 2) Recruitment and Retention of Volunteer Firefighters. Category 1 provides two-year grants to assist fire departments by paying the salaries and benefits of the SAFER-funded positions. Category 2 grants can have a period of performance of up to four years.	There were no annual salary limits, and there were no cost-sharing requirements for grant awards made under the FY15 appropriations.  Applicants wanting to apply for both a Hiring Grant and a Recruitment and Retention Grant must submit two separate applications, one for each category.	In general, obligated through a competitive nationwide grant program administered by Federal Emergency Management Agency
Federal	United States Department of Agriculture (USDA) Water and Waste Water Loans and Grants Program	The Water and Waste Water Loans and Grants Program provides financial assistance for the construction, repair, or improvement of water, sanitary sewer, solid waste disposal, and storm wastewater drainage facilities.	Construction, repair, or improvement of water, sanitary sewer, solid waste disposal, and storm wastewater drainage facilities.	The applicant organization must be a public body, not-for-profit, or federally recognized tribe. Facilities must be located in a city, town, or unincorporated area with a population of less than 10,000, based upon the last decennial U.S. Census, or primarily serve rural residents.	Administered by the USDA Rural Development Interior Area Director, Jane Gibson in Fairbanks (907) 479-4362, ext. 4.
Federal	Administration for Native Americans (ANA) Social and Economic Development Strategies (SEDS) Grants	The SEDS program's intent is to promote economic and social self-sufficiency for American Indians and Alaska Natives. The program supports the principle that social and economic development are interrelated and essential for the development of thriving Native communities.	ANA is interested in supporting community-driven projects designed to grow local economies, increase the capacity of tribal governments, strengthen families, preserve Native cultures, and increase self-sufficiency and community well-being. Funded SEDS projects will include specific strategies for reducing or eliminating community problems and achieving long-range community goals; e.g., Green and Complete Streets or Transportation policies/ordinances or Traffic Code development.	Federally recognized Indian tribes, as recognized by the Bureau of Indian Affairs, are eligible to apply for funding.  Grantees must provide at least 20 percent of the total approved cost of the project.	In general, obligated through a competitive nationwide grant program administered by the Administration for Native Americans.

Source	Program	Description	Eligible Project Types	Requirements	Administration
Federal	Accelerating Innovative Deployment (AID) Program	The AID Demonstration program provides funding as an incentive to accelerate the use of innovation in highway transportation projects. FHWA expects approximately \$10 million to be made available for AID Demonstration grants in each of fiscal years 2016 through 2020 from amounts authorized within the Technology and Innovation Deployment Program (TIDP) under the FAST Act.  The new Notice of Funding Opportunity (NOFO) was published on September 1, 2016, continuing the AID Demonstration program under the Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94).	Several safety technologies are being promoted by the Every Day Counts (EDC) initiative and the Proven Safety Countermeasures initiative, which are eligible for this funding. These include:  • Addressing Rural Roadway Departure through systemic application of countermeasures  • Safe Transportation for Every Pedestrian (STEP)  • Roadside Design Improvements at Curves and more.	Applications are evaluated on a continuing basis until the available funding has been expended each year. So, tribes should apply as early as possible during each federal fiscal year (i.e., on 10/1) to increase the likelihood of being funded. Tribal departments may submit an application and designate in the project narrative that the application is "pending Tribal Council approval."  Tribal governments may apply directly to FHWA for this funding through Grants.gov at <a href="https://www.grants.gov/web/grants/view-opportunity.html?oppld=28865">https://www.grants.gov/web/grants/view-opportunity.html?oppld=28865</a>	The grants are administered through the FHWA Center for Accelerating Innovation.
Federal	Nationally Significant Federal Lands and Tribal Projects (NSFLTP) Program	The NSFLTP of the FAST Act provides \$300M in funding to build and repair roads and bridges that serve tribal or federal lands. The NSFLP helps underserved tribal areas fund large-scale infrastructure projects that will improve safety and mobility for their communities. NSFLP prioritizes highways and bridges that access national treasures and improve Indian Country's quality of life. Applications are accepted on a rolling basis. Federal lands management agencies and tribes can apply directly for grants under the program. Costs associated with project design are not eligible.	Single continuous projects that: (1) Are on a federal lands transportation facility, federal lands access transportation facility, or tribal transportation facility, but the facility does not have to be listed in the NTTFI or the national Federal lands transportation facility inventory; (2) Have completed the NEPA process, as demonstrated by a completed record of decision, finding of no significant impact, or categorical exclusion determination; and (3) Have estimated costs of at least \$25M.	Projects should: further the Department's goals; including: state of good repair, economic competitiveness, quality of life, and safety; have matching funds; improves critical transportation facilities' condition (e.g., multimodal transportation facilities); and serve land owned by multiple federal agencies or Indian tribes.  Funding: Up to 90% federal funds	The grants are administered through the Office of Federal Lands Highway.

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Federal	Department of Justice (DOJ) Coordinated Tribal Assistance Solicitation (CTAS)	Combines most of DOJ's available tribal-specific grant programs under a single solicitation. Funds are used to enhance law enforcement, combat domestic violence, bolster justice systems, prevent and control juvenile delinquency, strengthen the juvenile justice system, serve sexual assault and elder victims, and support other efforts to address crime.	The Office of Community Oriented Policing Services Purpose Area allows the purchase of the following technology: narrow band upgrade equipment, vehicular satellite radio systems, mobile data computers/laptops/terminals, and portable/mobile radios, etc.	CTAS is managed by DOJ's COPS, OJP, OVW, who manage awards by Purpose Area. Each Tribal government–specific grant program is referred to as a "Purpose Area." Applicants select the Purpose Area(s) that best address their individual public safety, criminal and juvenile justice and victimization needs.	In general, DOJ administers the grants.  Contact the Response Center, (800) 421-6770 or via e-mail at tribalgrants@ usdoj.gov
State	Alaska Department of Environmental Conservation Division of Water Clean Water Actions Grants, Clean Water Fund (ACWF), & Clean Water State Revolving Fund (CWSRF)	Alaska's Clean Water State Revolving Fund (CWSRF), and the Alaska Clean Water Fund (ACWF), are funded primarily by the U.S. Environmental Protection Agency (EPA) and administered by the Alaska Department of Environmental Conservation's (ADEC) Municipal Grants and Loans Program (MGL) with the purpose of providing low interest loans to utilities for wastewater system improvements and water quality related projects.  Up to 100% of a project's costs may be eligible for loan funds. ACWF loans can also serve as local match to most other federal or state funding sources.	A range of projects and associated costs are eligible for funding under the ADEC loan programs, such as planning, design and construction of wastewater facilities, including wastewater treatment plants, sewer interceptor and collection systems, and storm water collection and treatment systems. In addition, many nonpoint source protection, restoration and enhancement projects are eligible.  Under the total FFY17 capitalization grant amount awarded to the State, and to the extent there are sufficient eligible project applications, not less than 10% (\$797,700) of funding provided for projects must be used for following category types: green infrastructure; water or energy efficiency improvements; or environmental innovative activities.	It is the Grantee's responsibility to submit a draft work plan as part of the grant proposal. Once the award letter is issued, the DEC Project Manager will work with the Grantee to finalize the work plan and initiate the Agreement process. The work plan and project budget will be revised if necessary to meet the requirements established in the award letter and submitted in a timely manner to the DEC Project Manager.  Prior to the start of all projects that include environmental monitoring, measurements, or data generation, must have a Department approved Quality Assurance Project Plan (QAPP) and sampling plan. Depending on the project, these documents may be combined in the QAPP with prior approval from the DEC Project Manager.	In general, obligated through a statewide revolving loan program administered by the Alaska Department of Environmental Conservation Municipal Grants and Loans Program. Chandra McGee, (907) 451-2140, Chandra.McGee @alaska.gov

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Local	Special Districts: Community Facilities District (CFD), Improvement Districts	Special District created for the purpose of financing the acquisition, construction, operation, and maintenance of public infrastructure improve.		Acceptance by the owners of at least 25% of the land area proposed to be included in the district.	
Local	Development Stipulations	Development requirements are typically placed on proposed projects at the time of entitlement approval to help develop necessary public facilities.		Project developer must agree to proposed stipulations prior to entitlement approval.	
Local	Development Impact Fees	An "impact fee" is a fee that is determined by a municipality, and is placed on a proposed project to help cover the additional costs associated with upgrading affected public facilities resulting from the construction.			

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Local	Sales Tax	Funds from a portion of the municipality's sales tax	<ul> <li>Pedestrian facilities and programs</li> </ul>		
Local	General Obligation Bonds	Common county borrowing mechanism for transportation projects. Most general obligation pledges at the local government level include a pledge to levy a property tax to meet debt service requirements			
Non-profit	Lt. Joseph P. DiBernardo Memorial Foundation Grant Program	The Lt. Joseph P. DiBernardo Memorial Foundation provides grants to departments in need of personal life safety rope systems in North America.	For fire departments in the U.S. or Canada, which need personal life safety rope systems and can not afford them.	1) Essay detailing personal safety rope systems (PSS) need; 2) Applicant's needs for financial support; 3) How applicant will maintain PSS use proficiency; 4) Vendor estimate for equipment and training, etc.	In general, obligated through a competitive grant program.
Non-profit	The North Face® Explore Fund™	To inspire and enable the next generation of explorers by funding non-profit organizations that are working to reconnect children with nature. Eligible applicants are 501(c)(3) organizations, agencies seeking this designation, or that have a comparable fiscal sponsor.	Grants support organizations that encourage youth outdoor participation, focusing on: 1) Youth connections to nature; 2) Increasing outdoor recreational access; and 3) Providing experiential education for personal and environmental health.		In general, obligated through a competitive grant program.
Non-profit	PeopleForBikes Community Grant Program	The PeopleForBikes (PFB) Community Grant Program provides funding for important and influential projects that leverage federal funding and build momentum for bicycling in communities across the U.S. PFB has two grant cycles annually, and the Community Grant Program application has two parts: 1. Letter of Interest: Applicants submit an online letter of interest through PFB's website. LOIs must include applicant information, contact person, and project overview. 2. Full Application: PFB will request a full project application from a short list of qualified applicants. Invited organizations will receive access to the online application.	racks, bike parking, and bike storage  Large-scale bicycle advocacy initiatives; e.g., Ciclovías or Open Streets Days	PeopleForBikes accepts requests for funding of up to \$10,000, and does not require a specific percentage match. However, leverage and funding partnerships are considered very carefully. Grant requests in which the funding would amount to 50% or more of the project budget will not be considered.	In general, obligated through competitive grant program.

Source	Program	Description	<b>Eligible Project Types</b>	Requirements	Administration
Non-profit	Surdna Foundation - Sustainable Transportation Networks and Equitable Development Patterns	Sustainable Environments grants to: 1) overhaul America's low performing infrastructure with an approach to foster healthier, sustainable & just communities; 2) Strengthen/expand transportation project performance standards use to improve transportation options, increase access and mobility, reduce VMTs and greenhouse gas emissions, and advance climate resilient strategies; 3) Strengthen procurement and other policies, so transportation funds help create quality jobs and deliver the broadest possible public benefits to nearby communities; 4) Support innovative revenue models to build out sustainable transportation networks and ensure public benefits; and 5) Promote regional transportation and land use practices that integrate light rail, transit, and urban-suburban connections.	<ul> <li>501(c)(3) nonprofit organizations; government agencies are not eligible for funding unless partnered with a 501(c)(3) nonprofit organization.</li> <li>In certain cases, government agencies may apply through a fiscal sponsor. The fiscal sponsor must be a 501(c)(3).</li> <li>No funding to individuals, capital campaigns or building construction.</li> </ul>	A Letter of Inquiry must initiate the grant application process through the foundation's online application form.	In general, obligated through competitive grant program.
Non-profit	MJ Murdock Charitable Trust	Murdock's mission is to enrich the quality of life in the Pacific Northwest by providing grants and enrichment programs to 501(c)(3) nonprofit organizations seeking to strengthen the region's educational, spiritual, and cultural base in creative and sustainable ways.	Murdock's funding priorities include projects to elevate human services, health, and health care; scientific research and innovation; leadership development, scientific education, and organizational capacity building:  Capital - New facility and facility renovations  Equipment and Technology - Major items: 10-year life  Program and Staff - New or expansion of existing programs; staff and related items; and internal capacity building	Requests for less than \$50,000 are generally discouraged.  A <u>Letter of Inquiry</u> must initiate the grant application process through the foundation's online application form.	In general, obligated through competitive grant program.

