CSET Newsletter

rural · isolated · tribal · indigenous

Center for Safety Equity in Transportation

If you havc a right to gct thcrc, you havc a right to gct thcrc safcly.
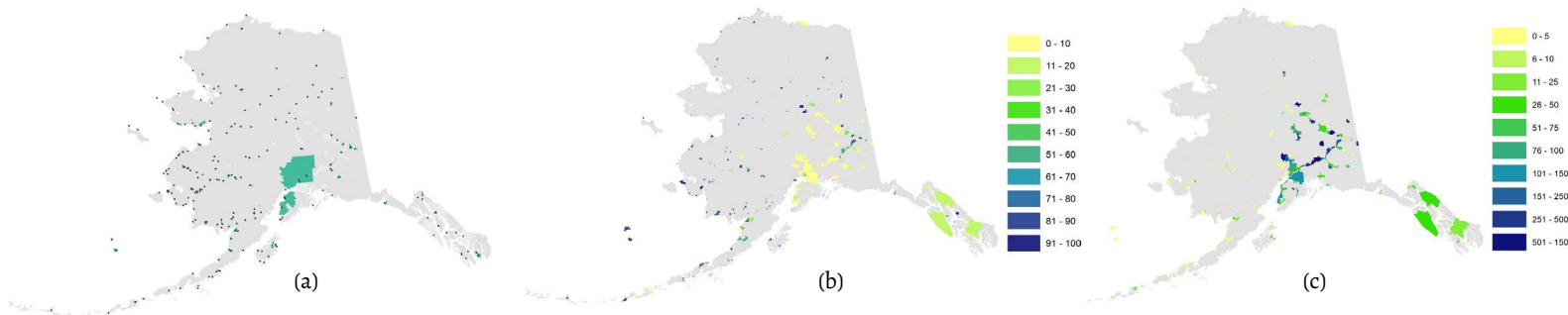
CSET Research Showcase

A Comparison of Crash Reporting and Safety Data in Alaska

Alaska has hundreds of communities that are not "on the highway system." Some of these are small cities, sometimes called "rural hubs." Typically these have an asphalt runway and some local highways. However, in these hubs and the smaller communities, the road system is limited, and automobiles and small trucks share the few available roads with ATVs and snow machines. In the winter, rivers are used by snow machines, ATVs and highway vehicles. The hubs generally have Alaska State Troopers and local police. A few of the smaller communities have Village Public Safety Officers (VPSOs),while some have no formal law enforcement presence at all. **As a result, the nature of crashes and their reporting in rural areas of Alaska are likely to vary from the standard.** Planning and funding mechanisms require safety data which are not available for many rural situations. To that end, three sources of data were compared for this study: the Alaska DMV database of highway crashes, the Alaska Trauma Registry (AKTR) of injuries recorded at acute care facilities, and newspaper records from three Alaska communities (one each of large, medium and small population size). DMV crashes were obtained through AKDOT&PF, the AKTR through the Division of Public Health, and newspaper records were extracted manually online when available or on microfilm from the Rasmussen Library at UAF. These three newspaper sources included the Fairbanks Daily News Miner, Ketchikan Daily News, and the Nome Nugget. The records in all three primary sources were then analyzed to determine only those that were transportation and of those, which occurred on roadways. The records were then matched across data sources using date and description of occurrence.

Trauma Registry and newspaper data indicate that crashes of off-road vehicles are usually not reported in the DMV database. In Fairbanks, the TR numbers indicate that crashes with

Announcements

CSET has positions open for post-doctoral researchers, graduate and undergraduate students interested in RITI transportation equity and safety research. Please contact us at cset.utc@alaska.edu.

A snowmachine uses the shoulder of the Nome-Council Road near Nome, Alaska.

(a)

(b)

| 0 - 10 |
| 11 - 20 |
| 21 - 30 |
| 31 - 40 |
| 41 - 50 |
| 51 - 60 |
| 61 - 70 |
| 71 - 80 |
| 81 - 90 |
| 91 - 100 |

(c)

| 0 - 5 |
| 6 - 10 |
| 11 - 25 |
| 26 - 50 |
| 51 - 75 |
| 76 - 100 |
| 101 - 150 |
| 151 - 250 |
| 251 - 500 |
| 501 - 1500 |

The 229 federally recognized Alaska Native communities and tribal lands of Alaska (a), Census-designated places of Alaska by percent Alaska Native population (b), and number of crashes in DMV records by Census-designated place for 2009-2014 (c).

UAF UNIVERSITY OF ALASKA FAIRBANKS

UNIVERSITY of WASHINGTON

University of Idaho

UNIVERSITY of HAWAI'I MĀNOA

Alaska Crashes (continued from page 1)

injuries are not reported or under-reported in the DMV database and the newspapers. Contrasting Nome and Ketchikan, we note that newspaper reporting in smaller towns may vary in thoroughness, but a large fraction were picked up in the newspapers that were not in either the DMV or the TR. It appears that, in small communities, the most complete set of crash "data" may be found in the local newspaper. Beyond that, **the Alaska Trauma Registry identifies several more Alaska Native communities as "hot spots" than does the DMV Crash records**, at least for the five-year period analyzed. Thus, when seeking support for transportation system improvements that would improve vehicular safety, officials in these communities would do well not to neglect newspaper reports and trauma registries as valid sources of data. As community size increases, the local paper has many competing events to report, with the result that a smaller percentage of crashes are reported. The Trauma Registry appears to be valid regardless of community size though the information, particularly that of the location of the harmful event, is largely self-reported.

Top 20 Locales Based on Five-Year Total of Trauma Registry Records

PLACE NAME	POPU-LATION	ALASKA NATIVE	PERCENT ALASKA NATIVE	ON-ROAD TRAUMAS (2009-2014)	TRAUMAS PER CAPITA
Portage Creek	2	1	50.00	1	0.500
Livengood	13	3	23.08	2	0.154
Whale Pass	31	0	0.00	2	0.065
Glenallen	483	37	7.66	23	0.048
Cooper Landing	289	4	1.38	13	0.045
Mentasta Lake	112	85	75.89	5	0.045
Takotna	52	12	23.08	2	0.038
Gulkana	119	91	76.47	4	0.034
Trapper Creek	481	31	6.44	16	0.033
Port Heiden	102	85	83.33	3	0.029
Levelock	69	58	84.06	2	0.029
Paxson	40	0	0.00	1	0.025
Shungnak	262	247	94.27	6	0.023
Wasilla	7831	406	5.18	164	0.021
Koliganek	209	200	95.69	4	0.019
Stony River	54	45	83.33	1	0.019
Gakona	218	43	19.72	4	0.018
Pitkas Point	109	106	97.25	2	0.018
Moose Pass	219	3	1.37	4	0.018
Selawik	829	708	85.40	15	0.018

Top 20 Locales Based on Five-Year Total of DMV Crash Records

NAME	POPULA-TION	ALASKA NATIVE	PERCENT AK NATIVE	# OF CRASHES (2009-2014)	CRASHES PER CAPITA
Dot Lake	13	3	23.08	19	1.462
Eureka	29	2	6.90	34	1.172
Livengood	13	3	23.08	15	1.154
Chicken	7	0	0.00	7	1.000
Mendeltna	39	0	0.00	30	0.769
Petersville	4	0	0.00	3	0.750
Paxson	40	0	0.00	29	0.725
Tolsona	30	0	0.00	15	0.500
Nelchina	59	5	8.47	27	0.458
Wiseman	14	0	0.00	6	0.429
Alcan Border	33	0	0.00	12	0.364
Primrose	78	4	5.13	28	0.359
McKinley Park	185	0	0.00	64	0.346
Point Possession	3	0	0.00	1	0.333
Chickaloon	272	17	6.25	90	0.331
Cooper Landing	289	4	1.38	95	0.329
Chistochina	93	50	53.76	30	0.323
Glacier View	234	2	0.85	72	0.308
Harding-Birch	299	10	3.34	91	0.304
Moose Pass	219	3	1.37	58	0.265
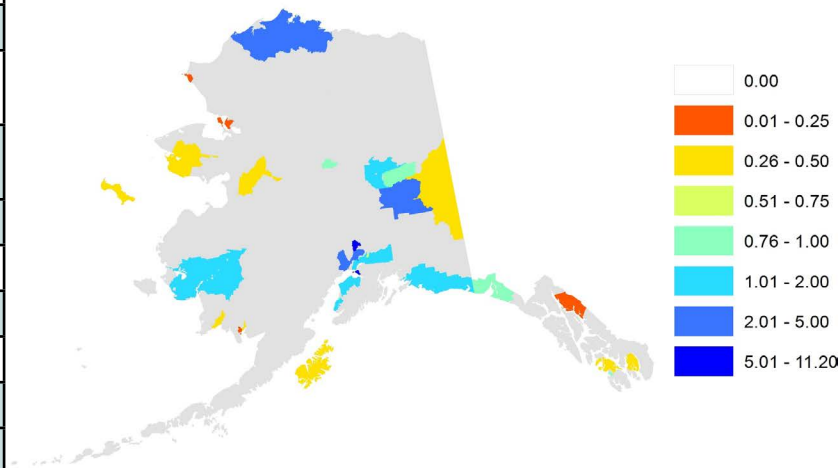
Ratio of DMV crash records to Trauma Registry Records for 2009 through 2014 by Zip Code. Ratios of less than or equal to 1 indicate more records in the trauma registry. Ratios greater than 1 indicate more records in DMV. A highlighted row in the tables above indicates community is a federally recognized tribe.