

Proposed School Locations for the state of Utah United States of America

August 2018

for Silver Wolf Wushu

using SAITO software version 2.2.7.0 08/17/2018

title page image: the state animal of Utah is the Rocky Mountain elk (*Cervus canadensis nelsoni*). As can be determined from the genus portion of the scientific name, Rocky Mountain elk are actually deer. In fact, at one time they were thought to be the same species as the famed red deer of Europe (*Cervus elaphus*). For the most part, Rocky Mountain elk were nearly made extinct in North America through over-hunting and habitat loss. Male elk (bulls) have the double misfortune of growing impressive antlers and keeping harems for part of the year. This means that the bulk of males are not needed for breeding purposes and can therefore be hunted. A consequence is that the least fit males, at least in terms of antler size, tend to survive, while the most fit males are killed. One estimate is that there were ten million elk in North America in 1500 and less than 100,000 in 1900. The numbers have recovered, and there are estimated to be one million elk (four subspecies) in the western United States and Canada plus Wisconsin, Michigan, Minnesota, Missouri, Pennsylvania, Arkansas, Kentucky, Tennessee, Virginia and North Carolina.

Note that the subspecies known as tule elk (*Cervus canadensis nannodes*) are currently found only in California. Estimates are that there were 500,000 tule elk in California in the 17th century – within two centuries (1870) they had been wiped out. In 1874 a single breeding pair was discovered. In the 1970s protection measures were finally implemented and today there are estimated to be 4,000 wild tule elk in California.

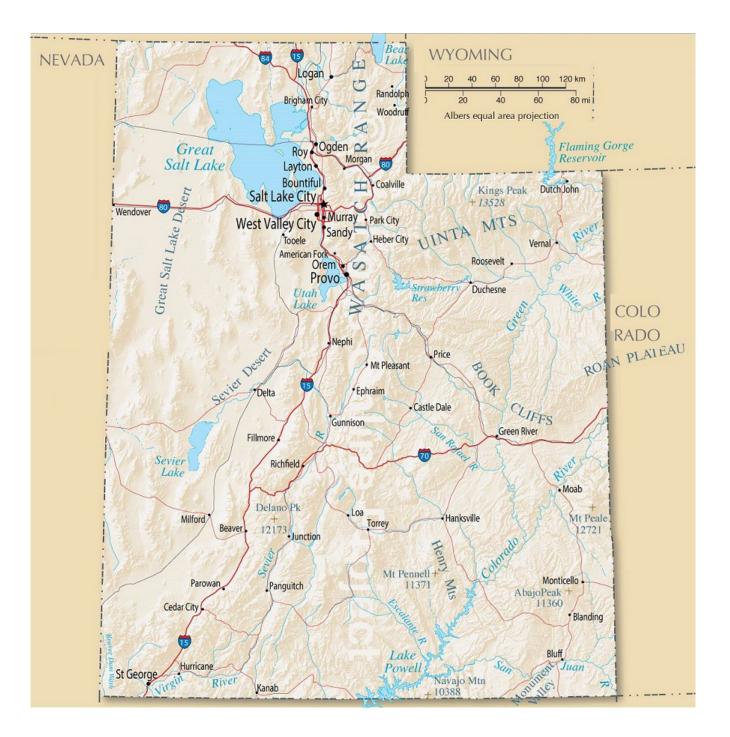
The subspecies known as Roosevelt elk (*Cervus canadensis roosevelti*) are also known as Olympic elk, and were found in rainforests of the Pacific Northwest, including Washington, Oregon and California. There are estimated to be 5,000 Roosevelt elk in Washington where they are the state mammal. Roosevelt elk have been reintroduced on Afognak and Kodiak islands in Alaska and on Vancouver Island and the mainland in British Columbia.

There are currently estimated to be 81,000 Rocky Mountain Elk in Utah. This number of elk is actually the sum of dozens of disjoint populations which arose when elk were reintroduced into states where they had become extinct. In 1913 elk were reintroduced in Colorado from Wyoming and in 1914 elk were reintroduced in South Dakota from Wyoming. Subsequently, elk have been reintroduced in Nebraska, Kansas, Kentucky and Washington with increases in Arizona, New Mexico, North Dakota and Oregon.

The aggressive restoration of elk has usually not taken into account their impact on other animal species ranging from beavers to moose, deer and mountain sheep as well as interactions with predators such as wolves, bears and mountain lions and the epidemiology of diseases like chronic wasting disease. This is a brain infection similar to bovine spongiform encephalitis, sometimes known as mad cow disease. As far as we are aware, there are no (zero) reported cases of elk transmitting chronic wasting disease to humans.

Geography

Our SAITO software views Utah state as a rectangle 240 miles wide (east to west) and two hundred eighty miles high (north to south) plus a rectangle 160 miles wide (east to west) and eighty miles high (north to south). Inside SAITO we have embodied a dislike for obliging people, with or without disabilities, to travel long distances, so the size of Utah and the seasonal severity of the weather imposes some constraints on the solution.



Although there are school districts in the United States that allow students to be transported across county and even state boundaries, SAITO treats states and provinces in isolation. This means any possible schools in, for example, Pocatello in Idaho, Page in Arizona, Wells in Nevada, Grand Junction in Colorado, Farmington in New Mexico, Evanston in Wyoming and so on would be ignored. Utah State is home to several First Peoples administrative areas. For those populations we are not knowledgeable about the frequencies of the 1400 genes we currently find of interest. Nor do we have any knowledge about education code specifically or special needs generally for those populations.

Demographics

We believe the state population is about 3,150,000 and that it has been growing at about 1% per year. The larger cities, towns and census-defined places are

Salt Lake City	193,744
West Valley City	136,574
Provo	116,868
West Jordan	113,699
Orem	97,499
Sandy	95,836
Ogden	86,701
St. George	82,318
Layton	75,655
Taylorsville	60,436
Logan	48,174

It has NOT been established that the medical conditions we find of interest are uniformly distributed, so Utah could have anywhere between zero and 250,000 people with the disabilities we find of interest. We used 120,000 as a state-wide estimate. The SAITO software reduces that prevalence to compensate for people who are too remote, cannot walk, are not interested, prefer to take vitamin B-13 and so on.

For school locations the SAITO calculated recommendations are

- 1. Salt Lake City 5 schools includes West Valley City, West Jordan, Sandy, Mill Creek and Taylorsville
- 2. Provo 1 school
- 3. Orem 1 school
- 4. Ogden 1 school
- 5. St. George 1 school
- 6. Layton 1 school

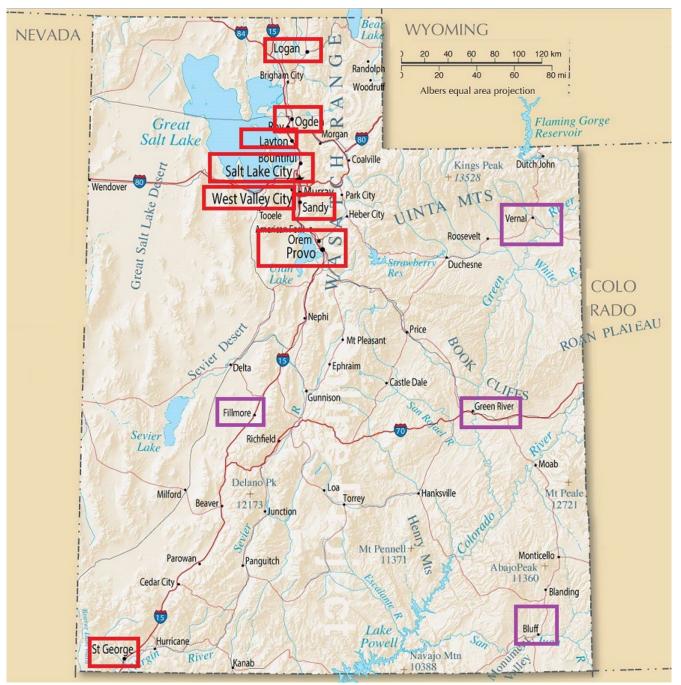
Probably dependent on subscriptions

- 7. Fillmore
- 8. Green River
- 9. Vernal
- 10. Bluff

We used the US Census (2010) data to estimate reservation populations

Confederated Tribes of Goshute People	210
Northwestern Band of the Shoshone Nation	431
Paiute Tribe of Utah	928
Skull Valley	31
Timpanogos – status unclear	
Uintah and Ouray	19,182
Navajo Nation (mostly San Juan County)	7,278

We have no appreciation of what interest there might be in our curriculum, and we have no information about population densities on tribal lands and reservations. The SAITO results are



The two major determinants for whether a school could or should be built at a smaller town like Fillmore, Green River, Vernal or Bluff is whether the tuition can cover rent, utilities and a teacher's salary. If not, it is possible for students to follow an internet broadcast from home, school or day care and send video recordings in to be graded. We would recommend daily filming and grading. Note that if the internet connection for the broadcast is interrupted the student can obtain the class video from the archives. Likewise, winter weather might delay the uploading of daily student videos so some tolerance and patience may be needed.