



**The  
Concrete Trail  
System  
Concept Plan**

# The Concrete Trail System Concept Plan

January 2016

This document and the planning process that led to its creation was a product of the Concrete Trail System Committee:

Jason Miller  
Michael Bartel  
Stephen Johnson  
Chris Kennedy  
Recreation and Trail Committee (R.A.T.s)  
Brooke Pederson  
Marjorie Bell

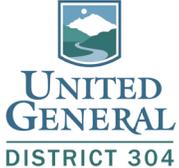
Town of Concrete, Mayor  
Town of Concrete, Parks Committee  
Resident  
Concrete High School, Varsity in Volunteering (ViV)  
Concrete High School  
Resident  
United General Hospital District 304,  
Community Health Outreach Program (CHOP)  
United General Hospital District 304 (CHOP)  
United General Hospital District 304 (CHOP)  
National Park Service, North Cascades National Park  
National Park Service, North Cascades National Park  
National Park Service, North Cascades National Park

Rachel Sacco  
Mitch Metcalf  
Michael Brondi  
Katie Griffith  
Katie Bunge

Technical support with this project and concept plan has been provided by a grant from the National Park Service’s Rivers, Trails and Conservation Assistance (RTCA) program:

Stephanie Stroud  
Katrina Rabeler  
Michael Linde

Project Manager  
Project Planner  
Chief, Partnerships; Pacific West Region



All uncredited photos in this concept plan provided courtesy of Jason Miller.

*Special thanks to AmeriCorps!*

# TABLE OF CONTENTS

Foreword from the Mayor.....	4
Vision, Mission, and Goals.....	5
<u>Section I: Community Research.....</u>	<u>6</u>
Historic and Cultural Timeline.....	7
Map of Coastal Salish in Pacific Northwest.....	9
Demographics & Community Health.....	10
Natural Resources.....	14
Climate Change in Skagit County.....	17
Existing Trails and Recreation.....	18
<u>Section II: Community Input.....</u>	<u>22</u>
Trail System Survey Results.....	23
Benefits of a Trail System.....	25
Trail System Conceptual Design Concepts.....	27
Safe Routes to School.....	30
<u>Section III: Resources.....</u>	<u>31</u>
Works Consulted.....	32
Appendix.....	33
2014 Healthy Youth Survey Data.....	33
Trail System Survey Results.....	34

## FOREWORD FROM THE MAYOR

January 2016

You hold in your hands an exciting document! This Concept Plan represents the culmination of a year of dedicated thought surrounding the creation of a formal trail system within the town limits of Concrete and how that system might connect to the public and private lands surrounding the town. It reflects the work of the Town of Concrete Trail System Committee, which was formed in 2014 by partners from the Town of Concrete, North Cascades National Park, Concrete School District, Mt. Baker-Snoqualmie National Forest, Community Health Outreach Program (a branch of United General Hospital District 304), and area nonprofit organizations that promote public health and engage youth. That year, the group was awarded technical assistance from the National Park Service's Rivers, Trails, and Conservation Assistance program.

Working collaboratively, the committee created a survey to gather public input and hosted a workshop to analyze potential trail locations in Concrete. After the survey and workshop took place, the committee's numbers grew, with enthusiastic Upper Valley citizens and students from Concrete High School joining the conversation and contributing their knowledge to produce this Concept Plan. A living document, the Concept Plan provides a snapshot of the admittedly rudimentary system in place now, while musing on what the future could bring: a fully realized trail system that improves our citizens' health, connects them to daily needs and recreational destinations, and draws visitors to enjoy all that Concrete has to offer.



Jason Miller, Mayor  
Town of Concrete

# VISION, MISSION, AND GOALS

## **VISION:**

An integrated and high-quality trail system that serves and engages eastern Skagit County residents and visitors, creating a healthier and more prosperous community by connecting people of all ages and abilities to local and regional destinations and natural wonders.

## **MISSION:**

The Concrete Trail System Committee brings civic, recreation, and non-profit partners together to guide the development of a non-motorized trail network in and around the Town of Concrete, connecting people to places where they live, learn, work, worship, shop, exercise, and play.



Above: Puget Sound Energy's trout pond at "Cascade Days," Concrete.

## **GOALS:**

- Improve existing trails and create new trails in and near the Town of Concrete, eventually connecting to existing trail systems on adjacent public lands.
- Create a well-publicized trail system that is a source of pride to eastern Skagit County residents.
- Connect community members and visitors to key destinations within and around town, and provide opportunities for social connectedness among community members.
- Improve the physical and mental health of the community by providing year-round options for safe and easily accessible non-motorized transportation, recreation, and physical activity.
- Strengthen partnerships and generate new opportunities to work with nonprofit partners from recreation, health, community development, education, and other sectors.
- Foster youth interest and participation in a community trail system and related work on public lands, creating potential future career opportunities in the National Park Service, Forest Service, and other organizations.
- Enhance tourism to benefit the local economy.
- Highlight the natural and cultural history of the town and region.
- Enhance connectivity between Concrete, neighboring communities, and natural amenities.
- Establish a "Friends of Concrete Trails" group and engage community members, especially youth, in the civic process through the trails system project.



# **Section I: Community Research**

# HISTORIC AND CULTURAL TIMELINE

# SPAH-DAHK

**6,500 B.C.: Oldest Evidence of Native Americans in Skagit River Basin.** The fertile Skagit River Valley provided a home for many Native American tribes, known as the Coastal Salish (see page 8 for map). The Upper Skagit Indian Tribe descends from Native Americans that inhabited 10 villages on the Upper Skagit and Sauk rivers, including the land now known as Concrete. The Skagit River, and its bounty of natural resources such as salmon, mammals, upland game, camus root and cedar trees, shaped and sustained the culture that inhabited its valley, and the tribes flourished. Cedar longhouses lined the riverbanks from present-day Mount Vernon to Newhalem in northwest Washington. Extended families, or bands, lived in the longhouses, where they maintained cooking fires and hung smoked salmon from the rafters. On the north bank of the Skagit River, just southwest of the present town of Concrete, there was a village called “SPAH-dahk,” which contained two small winter houses. The Skagit River directly influenced their subsistence patterns, and fishermen regularly traveled in dug-out canoes to take turns dipping their nets at the height of the salmon run. The river here was famous for a deep hole and whirlpool, where a wealth-giving spirit lived. This village was part of larger and more powerful extended village along the Skagit River drainage, SBAH-lee-ook’w (‘mixture of people’).



Salmon was the most important food source for native peoples. Photo by: Drew Fleshman

**Early 1800s: Spanish, English, and American explorers came into contact with Puget Sound tribes surrounding modern day Seattle.** By 1846, the first non-Indian settlers began to trickle north into the Skagit Valley. Like their Native American counterparts, they were attracted to the valley’s plentiful natural resources — especially the fertile soil.

## MINNEHAHA

**1850s: The Treaties.** The territory’s governor and Indian Agent, Isaac Stevens, drafted several peace treaties. The Point Elliott Treaty, signed on January 22, 1855, by about 80 tribal leaders, including headmen of the Upper Skagit tribe, called for Puget Sound tribes to cede vast tracts of land. In exchange for their signatures, tribes were paid a small amount of money and were assured federal health, education, and welfare services, as well as the prerogative to hunt and fish at their traditional places. In addition, some land was reserved for their use. The government declared that the Upper Skagit were not one distinct group and therefore were not assigned a reservation. However, the remaining signatories and their people were expected to move onto the new Lummi, Swinomish, or Tulalip reservations within a year of Congressional ratification. Some tribes resisted, often fiercely. Rather than ensure peace, the treaties ignited an Indian war in eastern Washington when some tribal members refused to relocate. Following the U.S. government’s acquisition of Native American land for settlers, it neglected for decades to fulfill its benefactor role as stipulated in the Point Elliott Treaty and others.

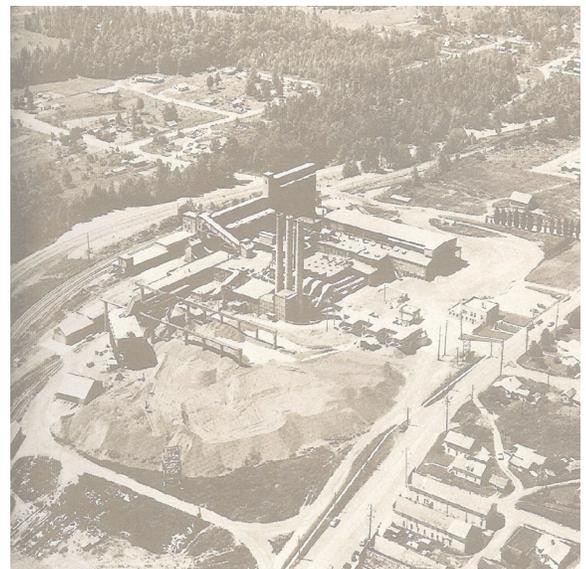
## CEMENT CITY

**Late 1800s: Settlers, following the gold seekers, placed claims on the lands surrounding the junction of the Baker and Skagit rivers.** Concrete’s original name was “Minnehaha,” named by gold-seeking settler Richard Challenger in 1888. The west bank was platted by Magnus Miller, who changed the name to Baker in 1890. The east bank was platted by Amasa Everett, who discovered lime and clay deposits in the area. Eventually a cement plant was built there by the Washington Cement Company. The settlement was known as Cement City.

**1901: The Seattle & Northern Co. railroad reached Baker and set off the boom that made the settlement into a town.** All products were brought in and out of town via railroad, including logs, shingles, lumber, cement, and the mail. Landowner C. W. Greist platted an area on the south side of the new tracks, just west of Baker. Greist named the area Grasmere after a summer home in England.

## BAKER

**1905-1906: Start of the concrete industry.** O.C. Miller built the Washington Portland Cement Plant. The plant produced 2,500 barrels of cement a day. A year later, John C. Eden began building another cement plant called Superior Portland Cement Company.



1905: the start of the concrete industry.

**1909: Superior Cement combined with Washington Cement plant to form the town of Concrete:** Many immigrants from Italy, Greece, and other European countries joined the flow of native-born American men in the early 1900s, seeking jobs in the cement plant and limestone quarry. The quarry work was dangerous as the men drilled, blasted, and crushed limestone rock to be used in the cement. Those who were lucky to escape injury or death often died early from lung diseases associated with breathing rock dust. The raw materials were first shipped from the quarry to rail cars until the first Baker River dam was constructed. Then a tramway was built that could haul loads in a continuous cycle from the quarry to the plant. The tramway stretched right over rooftops of houses along the pathway and a heavy steel mesh net was required under the tramway to keep loads from spilling on people below.



The Henry Thompson Bridge

**1916: Henry Thompson Bridge was built across the Baker River.** Using donations of material from both cement plants, it became the longest single-span cement bridge in the world.

**1921: Superior plant set the record of 70 cars loaded with cement and shipped in one day.** Concrete reached peak population of 1,700.

**Halloween 1938: Orson Welles' "War of the Worlds," describing an alien invasion of the United States, is broadcast over the radio.** The broadcast described huge machine-like monsters destroying power lines, releasing poisonous gases, and creating explosions that emitted great flashes of light. Suddenly, the Superior Portland Cement Co. electrical sub-station suffered a short circuit, causing a huge flash of light and all of the power in Concrete to go out. Many Concrete residents panicked: Some fled to the woods, one man drove to see a priest, others prayed on their porches, while many gathered on Main Street. The story of the panicked town made international news, and stories about Orson Welles still often include a comment about Concrete.

**January 1951: Upper Skagit tribe filed a claim with the federal government;** stated monetary compensation for the lands ceded to the United States was negligently small.

**1974: US District Judge George H. Boldt ruled that tribes are entitled to 50 percent of fish harvests.** Following that decision, the tribes became fishery co-managers with the state. For the eleven bands of peoples that were part of the Upper Skagit Tribe, years without a reservation home caused some to resettle in other states. The tribe gained formal federal recognition in the early 1970s, and a tribal constitution and bylaws were approved by the Secretary of the Interior in 1974. Ten years later, the Upper Skagit Tribe acquired a small reservation of federal trust land east of Sedro-Wooley.

**1968: Tribes fight for rights.** In September 1968, a final judgment ordered for the tribe to be awarded \$385,471.42 for ceded lands. The state of Washington attempted to regulate tribal fishing, but tribes resisted on legal grounds. The treaties specified that the right to fish (and hunt) in their usual and accustomed places was theirs. The federal government took the state to court on the grounds of its obligation.

## CONCRETE

**1973: The cement industry in Concrete came to a close.** In 1973, the last three smoke stacks were torn down at the Portland Superior Cement Co. In the following years, other resource-extraction industries followed suit, including logging and fishing.

**1989: This Boy's Life, a memoir by American author Tobias Wolff that takes place in Concrete, is published.** In 1993, the book was made into a film starring a young Leonardo DiCaprio, Robert De Niro and Ellen Barkin. The movie was largely filmed in Concrete, which was transformed to its 1950s appearance. Many of the town's citizens were extras on the set.

**2010-today: The economy of Concrete and much of the Upper Valley is dependent on logging, tourism, and small, diverse industries.** The Concrete Theatre re-opened in 2010, offering nightly entertainment. In Concrete Town Center, a painting project in 2012 brightened storefronts, further encouraging visitors to browse the shops, grab a bite to eat, and purchase needed supplies.

# MAP OF COASTAL SALISH IN PACIFIC NORTHWEST



Adapted from Salishan Languages Map in Barbara Brotherton (ed), *S'abadeb: The Gifts*, Pacific Coast Salish Art and Artists, Seattle: Seattle Art Museum and University of Washington Press, 2008: xix.

Source: Burke Museum: [http://www.burkemuseum.org/static/misc/coast\\_salish\\_art\\_map.pdf](http://www.burkemuseum.org/static/misc/coast_salish_art_map.pdf)

# DEMOGRAPHICS & COMMUNITY HEALTH

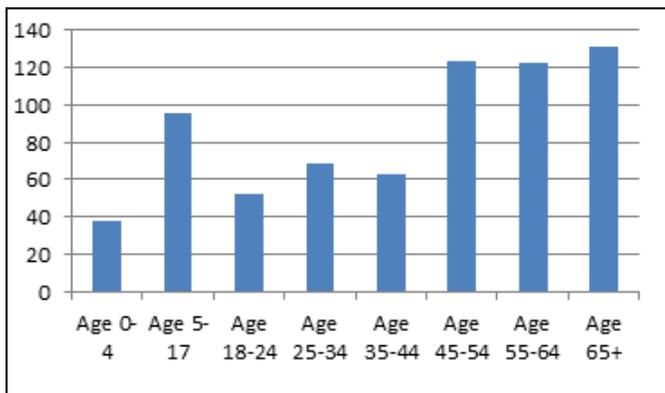
**Community Description:** Concrete is a town with a population of about 732. The Town of Concrete and the communities of eastern Skagit County are rural and populated by people who work in the logging industry, for the local power utilities, for government agencies, and in service industries, as well as many who commute to more populated areas to work or are self-employed.

Concrete is a geographically-remote Pacific Northwest community located in a census tract ranked 9 out of 10 for health disparities based on Social and Economic Determinates and Poor Health Outcomes. Residents face higher-than-state rates of food insecurity, obesity, diabetes, and other diet-related chronic diseases (WA State Dept. of Health). The cement industry was the town’s economic driver for nearly a century. After a slow decline, the last cement plant shut down in the early 1970’s. Similar trajectories followed for other formerly-abundant resource-extraction jobs in logging and fishing. The permanent loss of these family-wage blue-collar jobs was a hard blow for Concrete and surrounding communities, and has resulted in a persistent subculture of generational poverty. However, this is balanced by local norms of self-reliance, appreciation for the rural lifestyle, and a significant population of home gardeners, back-to-the-landers, and do-it-yourselfers. A strong spirit of self-reliance makes Concrete a unique and promising community.

## Demographics:

### AGE DISTRIBUTION IN CONCRETE:

Data Source: US Census Bureau, [American Community Survey](#). 2009-13. Source geography: Tract

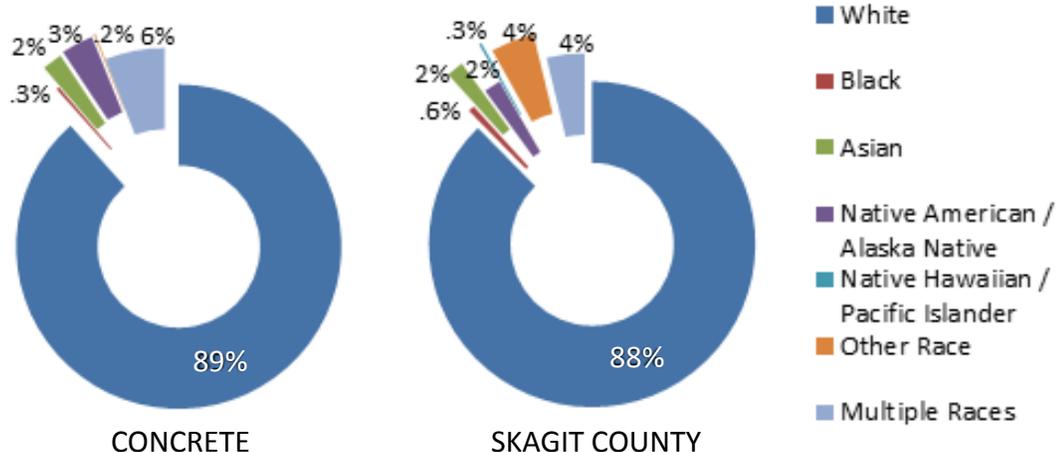


The majority of Concrete’s population is 45 years or older. The next largest age group is school-age children (5-17 years).

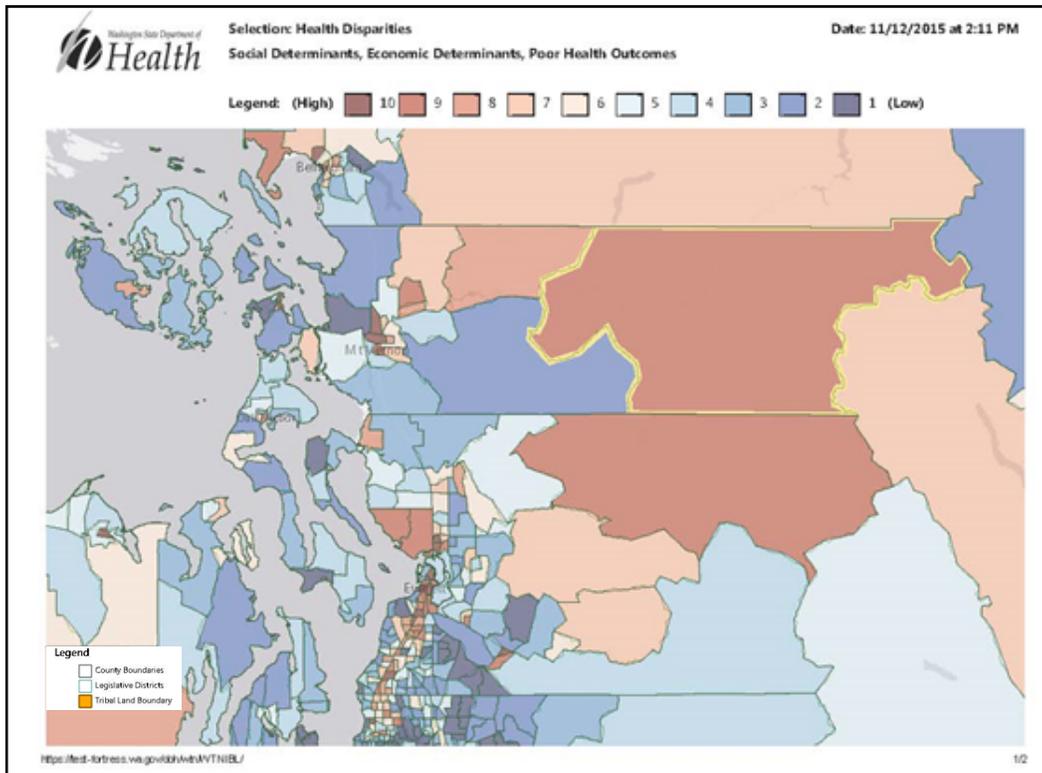
Concrete also has a majority English-speaking community that is about 89% white.

### RACE DISTRIBUTION IN CONCRETE AND SKAGIT COUNTY:

Data Source: US Census Bureau, [American Community Survey](#). 2009-13. Source geography: Tract



## Social and Economic Indicators of Health:



This map uses social, economic and health outcomes data to create a composite score to represent areas that are at risk for health disparities, with 1 being the lowest risk and 10 being highest. The census tract that Concrete is in, which is weighed heavily by the population of Concrete, ranks 9 out of 10.

**Social Determinants:**

- No high school diploma 8
- Limited access to a vehicle 6
- Limited English 2
- Population 65+ living alone 3
- Population with a disability 10

**Economic Determinants:**

- Children in poverty 7
- Unaffordable housing 7
- No health insurance 9
- Poverty 8
- Single parent household 8
- Unemployment 10

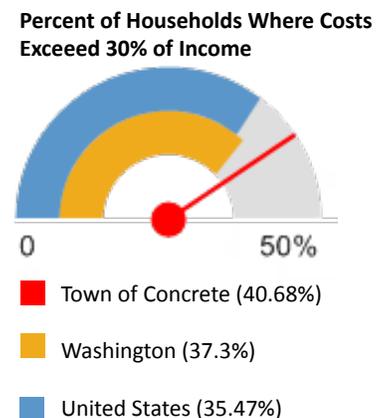
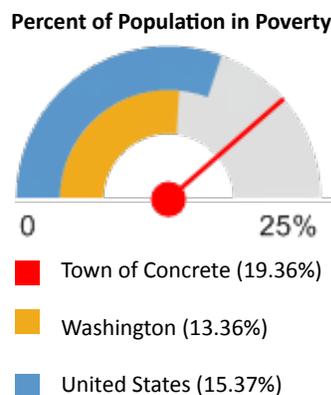
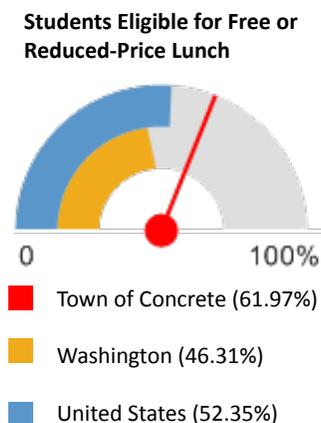
**Poor Health Outcomes:**

- Low birth weight 10
- Low life expectancy at birth 10
- Mortality 9
- Premature mortality 10

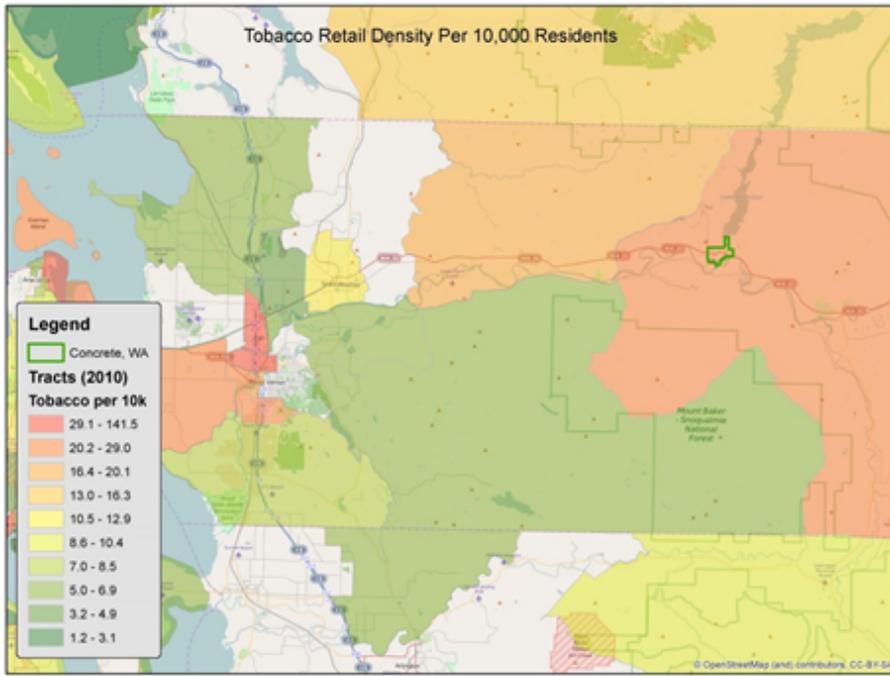
Numerous studies have shown that residents of low-income communities are less healthy than those living in higher-income communities. Low-income individuals and families often lack adequate access to clean and safe affordable housing, healthy food outlets, parks, preventive health care clinics, and reliable transportation options. As a result, low-income people experience more daily stressors and have fewer support systems and resources to help alleviate challenges. Poverty is a common denominator for poor health outcomes, including chronic diseases such as diabetes, heart disease, and some cancers that are linked to lack of healthy foods and physical activity. This trend is manifested in Concrete, which is in a census tract that ranks high for poverty and a number of poor health outcomes, as shown in a Washington State Department of Health map (above). The map also highlights an above-average number of high school drop-outs and residents living with disability.

### POVERTY IN CONCRETE AND WASHINGTON STATE, COMPARED TO UNITED STATES:

Data Source: US Census Bureau, [American Community Survey](#), 2009-13. Source geography: Tract



**Built Environment:**



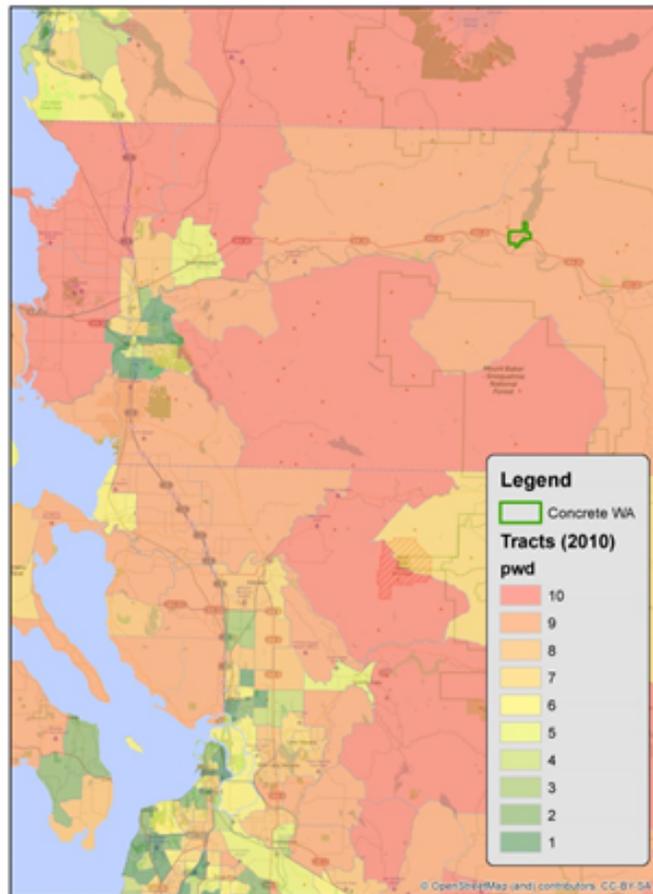
A community’s health is affected by the physical environment. Safe and healthy environments provide access to nutritious food, open space and recreational opportunities, and limit exposure to harmful substances.

Concrete has a higher-than-average number of tobacco and alcohol dispensaries in its community (WA State Dept. of Health), which can promote permissive norms and contribute to harmful health behaviors among youth.

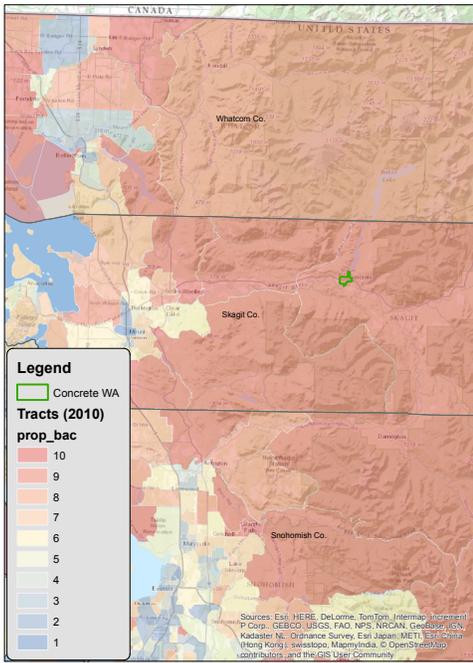
Despite being surrounded by forests, Concrete residents do not have easy access to the outdoors (Washington State Dept. of Health). Most trails require a significant amount of driving to access, which can be a barrier for low-income residents who may not have access to a motor vehicle.

Creating trails close to residential areas and destinations promotes walking and biking as a daily mode of transportation, which can have a positive impact on health.

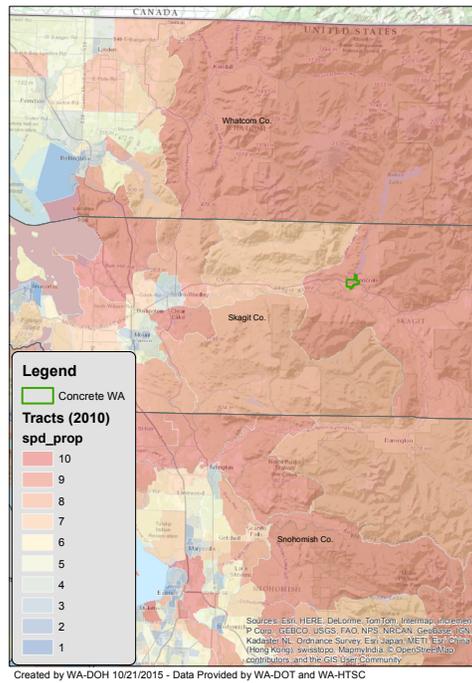
**Park Access Score Using Population Weighted Distance Method**



**Traffic Safety Ranking: Proportion of Traffic Fatalities and Serious Injuries Involving Alcohol. 2009-2013**



**Traffic Safety Ranking: Proportion of Traffic Fatalities and Serious Injuries Involving Speeding. 2009-2013**



Crashes per 1,000 population in Concrete rank average, at 5/10, with a high proportion of crashes involving speeding and/or alcohol (Washington State Dept. of Health).

Targeting areas of speeding in the town, and discouraging drunk driving through education, can improve safety along roadways.

## Youth Health in Concrete

The Washington State Healthy Youth Survey (HYS) (see appendix) is a health knowledge, attitudes, and behaviors questionnaire completed every two years by public school students in grades 6, 8, 10, and 12. Concrete HYS results show higher-than-average county and state rates of tobacco use and underage drinking. In addition, many Concrete youth report a lack of healthy adult role models and believe that they are not recognized for positive behaviors.

Currently there are very few summer engagement activities for teens in Concrete, so the creation of recreation-based employment for adolescents will help kids learn lifelong skills and engage in healthier lifestyle choices during the summer months. A community trail system can contribute to a healthier community by connecting known needs with opportunities. The Concrete Trail System effort can engage youth and provide volunteer and paid work opportunities that will help them develop practical skills, connect with positive role models, provide healthy outdoor activity, and ultimately help them stay in school. Through these activities they will improve access to trails for community members with disabilities, so that all residents can comfortably experience their community. In addition, a comprehensive trail system can generate



Photo by: Alona Millison

## NATURAL RESOURCES



View of Mt. Baker

### Geology

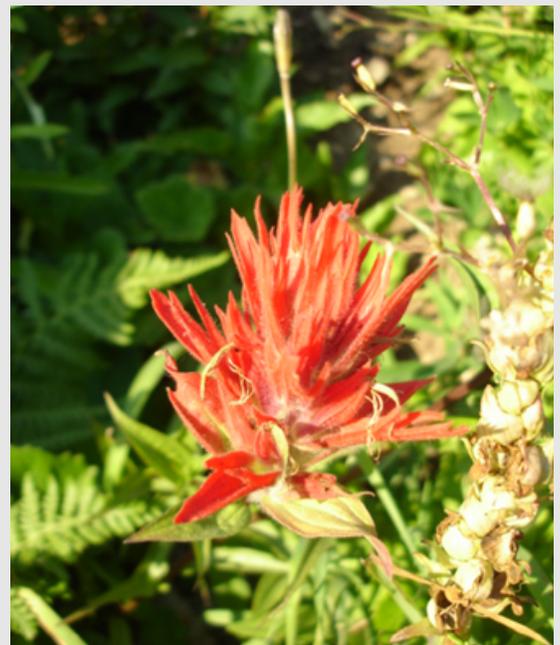
The town of Concrete is located in the North Cascades mountain range at the confluence of the Baker and Skagit Rivers in eastern Skagit County. The surrounding mountains were formed about 12 million years ago by the folding, buckling, and uplifting of the earth due to the collision of the Pacific tectonic plate with North America. This collision is ongoing and caused the creation of Mt. Baker, an active volcano about 25 miles north of Concrete, in the past million years or less. The present topography was largely shaped by the glaciation of the area during the ice age that ended about 13,000 years ago.

During the last ice age, Skagit County was covered with more than a vertical mile of ice. The movement of this ice scoured lower-elevation hills and mountains and shaped the valleys. As the ice began to melt, an enormous lake was formed by an ice dam closer to the Pacific Ocean and clay, sand, rocks, and boulders carried by the glacial ice were deposited as sediment over the bedrock. Erosive forces of the Skagit River and its tributaries cut and shaped hills and valleys from the sediment. One can easily observe the layers of clay, sand, cobbles, and boulders in road-cut banks in and around Concrete.

The mix of parent materials and enormous forces that formed these mountains created the many minerals that can be found in the area today. Concrete was named for the industry based on processing the local limestone. Other minerals including lead, copper, olivine, jade, and various gemstones can be found in small quantities in the area.

### Vegetation

The Concrete area is naturally surrounded by lush vegetation resulting from the 70-plus inches of annual rainfall. Most of the original old growth coniferous forests have been logged and replaced by working forests represented by clearcuts of all ages. Remaining old growth forests may be visited in nearby public lands including Rockport State Park and Mt. Baker-Snoqualmie National Forest. Area homestead and farmlands include grasses, shrubs and a mixture of native and planted deciduous and coniferous trees. Areas near rivers and streams contain plants adapted to wetland conditions, including sedges, grasses, willows, cottonwoods, alders and cedars. The vegetation near Concrete is typical of low-elevation plant communities around northern Puget Sound. Dramatic changes in these plant communities can be seen as one travels from the valley floor up onto the surrounding mountains to view subalpine forests and meadows.



Indian Paintbrush growing in the wild

## Wildlife

Concrete and the surrounding area are rich in a wide variety of wildlife supported by the varied habitat in and around town. Nearby private and public forest lands include all ages of forest from clearcuts to mature trees and provide homes for larger mammals including deer, black bear, bobcats, cougars, coyotes, elk, and numerous smaller species such as rabbits, shrews, voles, bats, mountain beavers, lizards, toads and snakes.

The rivers, streams and wetlands provide habitat for beavers, otters, mink, muskrats, and birds such as ducks, geese, loons, and herons. These riparian areas also provide homes for a large variety of amphibians, including salamanders, frogs, and newts.

Many species of birds make the area their home or pass through during their annual migrations. The varied habitat provides food and shelter for warblers, finches, robins, thrushes, wrens, nuthatches, jays, flickers, hummingbirds, grouse, swallows, and several species of woodpeckers. Many species of raptors, including hawks, owls, osprey, and falcons, are common in eastern Skagit County; in particular the area is known for hosting several resident bald eagles, as well as hundreds of eagles that visit the area each winter to feast on spawning salmon.



Photo by: Becky Luttrell



Local residents with their catch of salmon. Photo by Cheryl Werda.

## Fish

Flowing 150 miles from glaciers in the Canadian Cascade Mountains, through old growth forests and farmlands to Skagit Bay in the Puget Sound, the Skagit River and its tributaries support a great variety of resident and anadromous fish. The Skagit River is by far the largest breeding area for all five species of salmon found in Puget Sound. Outside of Canada and Alaska, it is one of the few rivers that sustains all of its original salmon species. Chinook, Coho, Chum, Sockeye, and Pink salmon, as well as Steelhead, Dolly Varden, and Cutthroat trout return each year to spawn in the rivers and streams in and near Concrete. Cutthroat, Rainbow, and Brook trout are common in streams and lakes in the area, and a population of landlocked Kokanee can be found in nearby Shannon and Baker reservoirs. Smaller fish include minnows, whitefish, and lamprey eels.

## Scenery

Concrete and eastern Skagit County are blessed with great scenery, including views of majestic mountains such as Sauk Mountain, Glacier Peak, and Mt. Baker, forested hillsides, and beautiful rivers and streams. Many types of wildlife are easily viewed, including elk that are frequent visitors and often can be observed from area roads. The Skagit and Baker Rivers are always changing and may be clear and peaceful or powerful and dramatically flooded depending on the season and weather. Climb a nearby hill or mountain to view the surrounding peaks and float a stretch of the Skagit River to look for eagles and otters and experience the majesty of the river.



View of Mount Baker from Baker River.

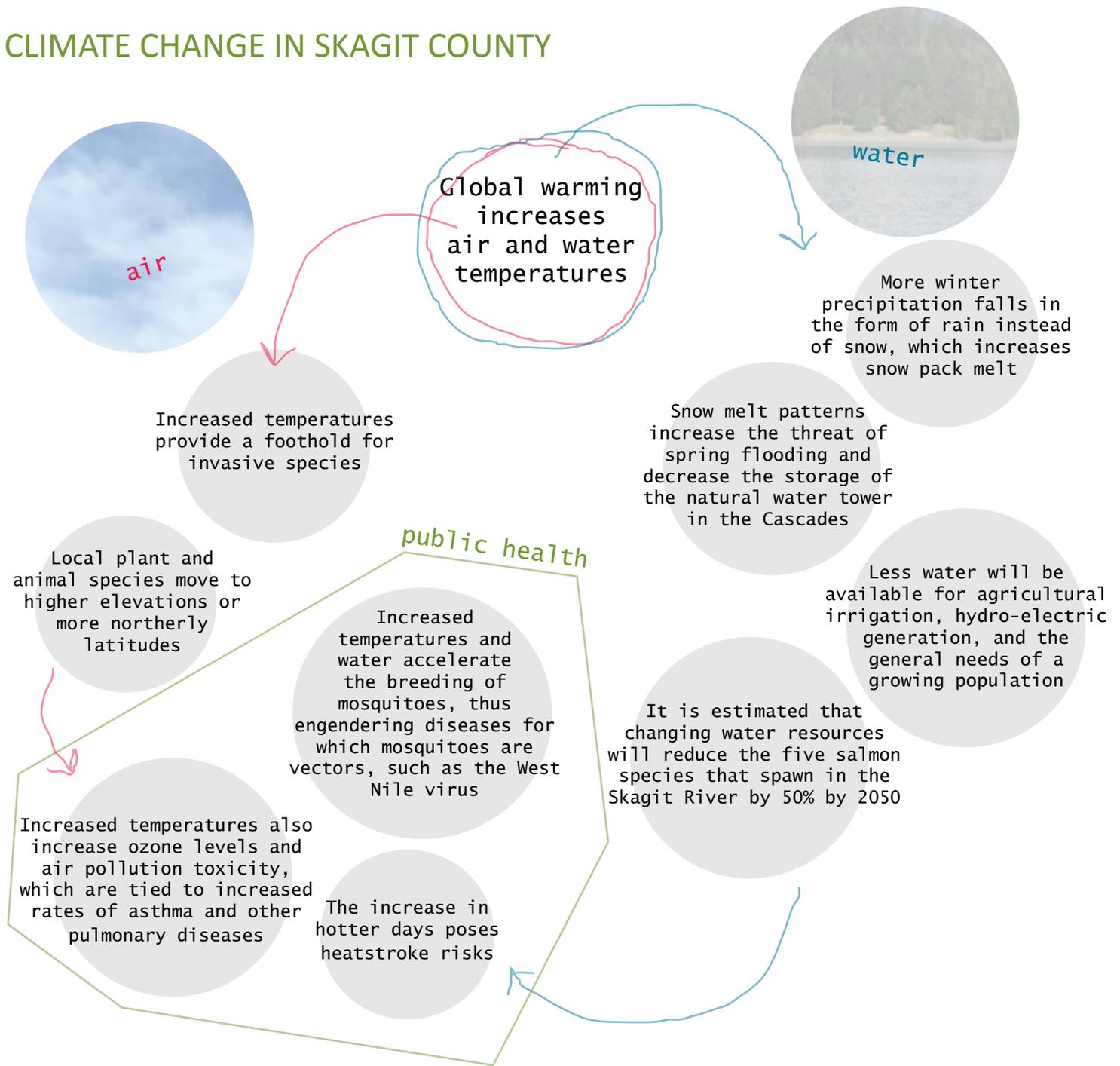
Impressive human creations in Concrete include Lower Baker Dam, the concrete silos in the municipal Silo Park, Mears Field (Concrete airport) with its Vintage Aircraft Museum, and the salmon diversion dam.



© Tim F Hale

View of Skagit River. Photo Credit: Tim F. Hale

# CLIMATE CHANGE IN SKAGIT COUNTY



The Skagit County Board of Commissioners created a broad-ranging initiative to address climate change, reduce resource consumption, and create a sustainable Skagit County with the Skagit County Climate Action Resolution in June 2008. Skagit County has committed to reducing regional greenhouse gas emissions to 80% below 2000 levels by 2050. Included in the action plan is a movement to maintain existing Urban Growth Area (UGA) boundaries and implement infill and densification with UGAs in a manner that: Adheres to principles of sustainability and reduction of carbon emissions; promotes more livable, pedestrian/bike-friendly, transit oriented communities; and preserves the carbon sink potential of surrounding rural and natural resources areas. The Concrete Trail System will play a role in both creating a pedestrian/bike-friendly community and in preserving the carbon sink potential of surrounding rural areas. It will also help foster a new generation of stewards who will break trail for leading Skagit County through future climate mitigation and adaptation<sup>13</sup>.

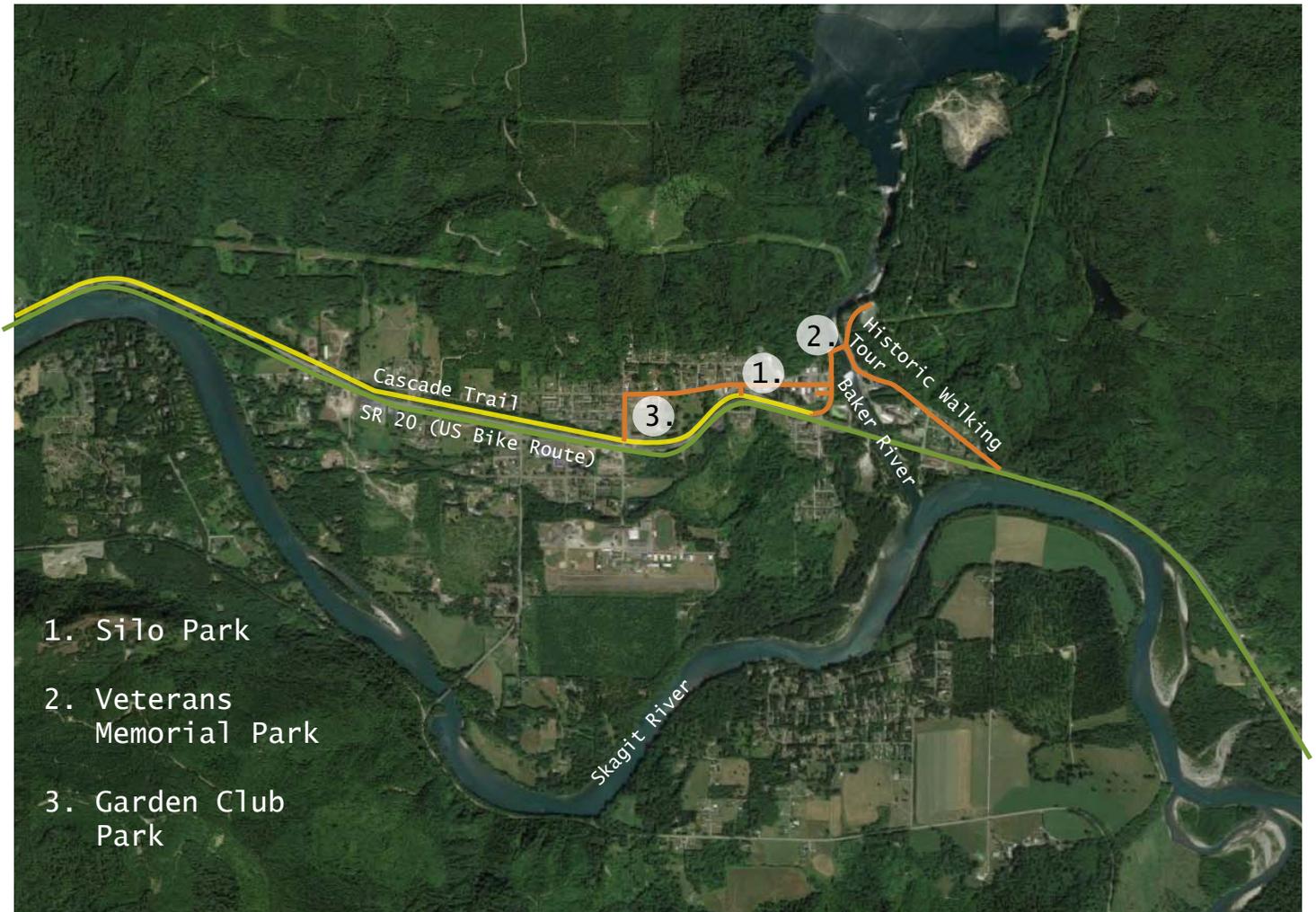
**In Washington State, the top greenhouse gas emission contributors are:**

**transportation (46%)**

**electricity generation (20%)**

## EXISTING TRAILS & RECREATION

Despite its industrial name and small size, Concrete is a town with lush scenery and great opportunities to enjoy the outdoors. Two rivers—the Skagit River and the Baker River—converge in Concrete. Both are popular destinations for anglers. The Cascade Trail, a crushed-gravel Rails to Trails path, terminates in Concrete. The Historic Walking Tour is a scenic walk down Concrete’s industrial past, and State Route 20 is a designated bicycle route. There also are three parks within the town: Silo Park, Veterans Memorial Park, and Garden Club Park.



### US Bicycle Route

State Route 20 is included as a US Bicycle Route by the American Association of State Highway and Transportation Officials, and is the first route designated in the system in Washington State. SR 20 is referred to as USBR #10 on the US Bike Plan, covering 416 miles with 172 miles of side routes and connections to British Columbia. SR 20 passes through 18 cities and towns including Anacortes on Fidalgo Island to Newport at the Idaho border, and connects Skagit, Whatcom, Okanogan, Ferry, Stevens and Pend Oreille counties.



Photo Credit: Susan Coppock



A Superior Portland Cement Company Railcar.

### **The Cascade Trail**

Completed in 1999, the Cascade Trail is a 22.5-mile rail-trail that follows the abandoned Burlington Northern grade connecting the towns of Sedro-Woolley and Concrete. The railroad was originally part of the Great Northern Railway, which transported lumber and cement during the 20th century. The trail has 12 benches, 23 trestles, and two bridges made from repurposed railcars. It parallels the Skagit River and State Route 20. Today it is a popular destination for many users, from horseback riders to bird enthusiasts.

**The Historic Walking Tour** is a free, self-guided loop tour around Concrete, with stops at key historic locations and buildings. The tour was the brainchild of the Concrete Heritage Museum, which secured funding to pay for the wayfinding signs and the publication used to help guide tour participants. The publication is available at the museum, select area businesses, and Town Hall.



**Historic Walking Tour**



**Veterans Memorial Park**

Located on Main St. near Concrete Town Center, **Veterans Memorial Park** is a place to sit and relax, or play ball. It includes picnic tables, a baseball diamond, and a tennis court with a basketball hoop.

**Garden Club Park** is situated just before the Henry Thompson Bridge on the east side of town. Currently under maintenance, the park will be getting a facelift to offer more amenities in the future.



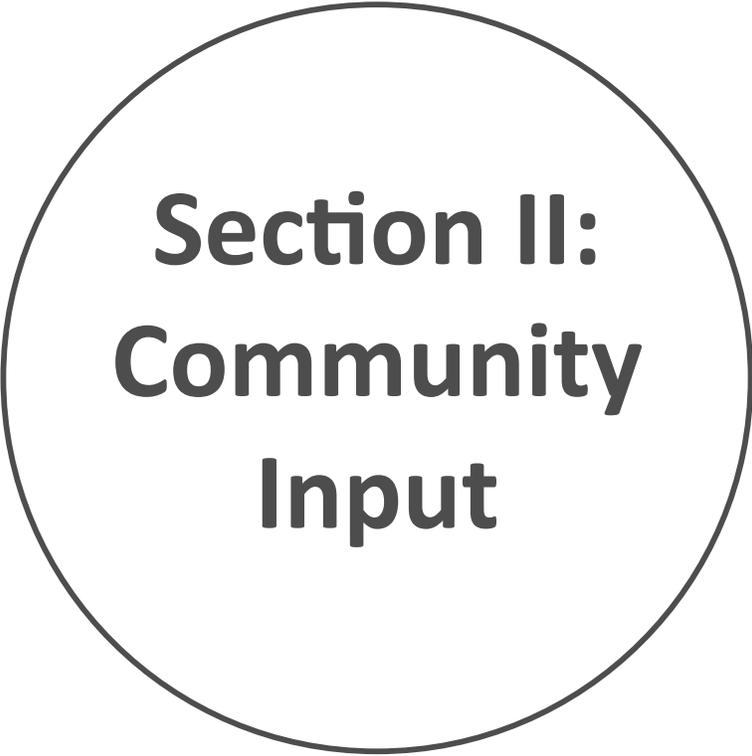
**Garden Club Park**



## Silo Park

Silo Park is situated at SR 20 and Superior Ave. N. The iconic silos are relics of Concrete’s industrial days. The structures are painted with lettering that states, “Welcome to Concrete,” painted there for the movie “This Boy’s Life,” filmed in 1992 with Leonardo DiCaprio and Robert De Niro. A technique was used to make the letters look older and faded for the film, which was set in the 1950s. Today, the park offers a massive green field, a skate park, and a playground. At its northwest corner lies the Angele Cupples Community Garden, a plot of garden spaces slightly smaller than a football field, which is flourishing thanks to hundreds of volunteer hours and donations since its start in 2010.

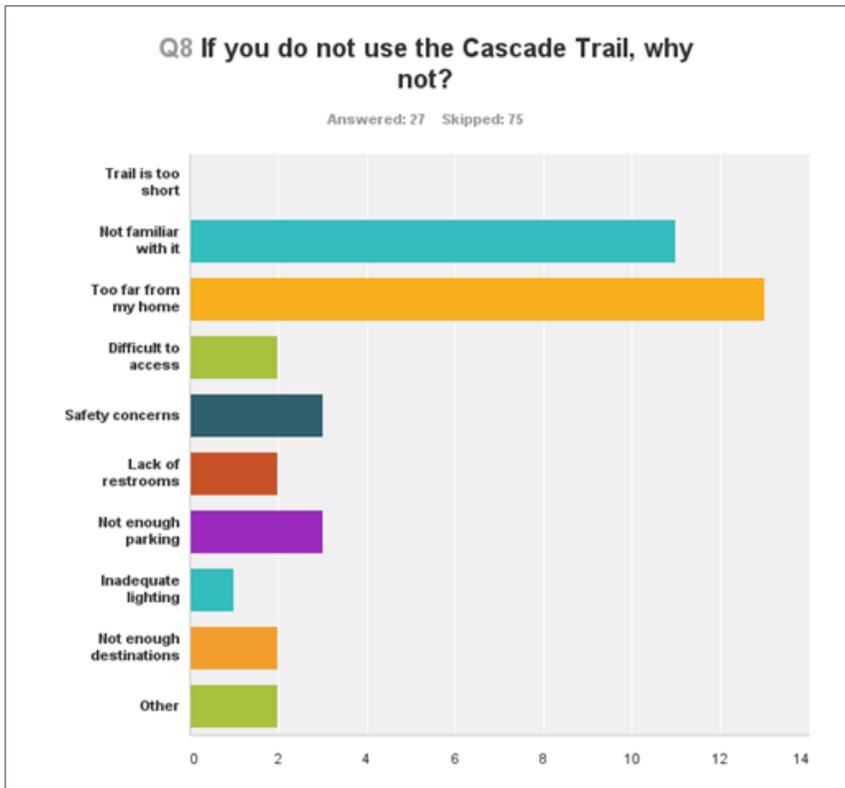
Silo Park is a massive blank slate that the town intends to develop more aggressively, beginning in 2016. In that year a Park and Ride and water spray park are planned for the western edge. In the planning stage is a bark park in the southeast corner. The town also is pursuing third-party vendors interested in building and maintaining a zip line and a climbing/bouldering wall on the north face of the silos, and wants to reroute a local creek, Lorenzen, through the park, flanking it with trails. The park already is a popular stopping point for residents and travelers alike.



# **Section II: Community Input**

# TRAIL SYSTEM SURVEY RESULTS

During the summer of 2015, 102 people completed the Town of Concrete Trail System Survey. Surveys were offered in hardcopy at local businesses, and electronically online, and were advertised through social media.



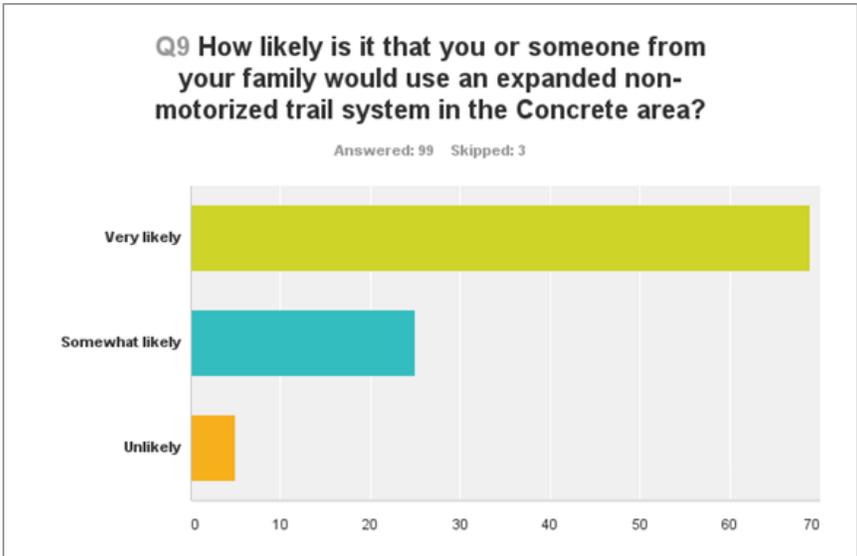
Nearly 50% of participants considered themselves full-time residents of Concrete, and the majority of participants were middle-aged.

Walking/hiking, wildlife viewing, and biking are the most common trail activities in which people participate.

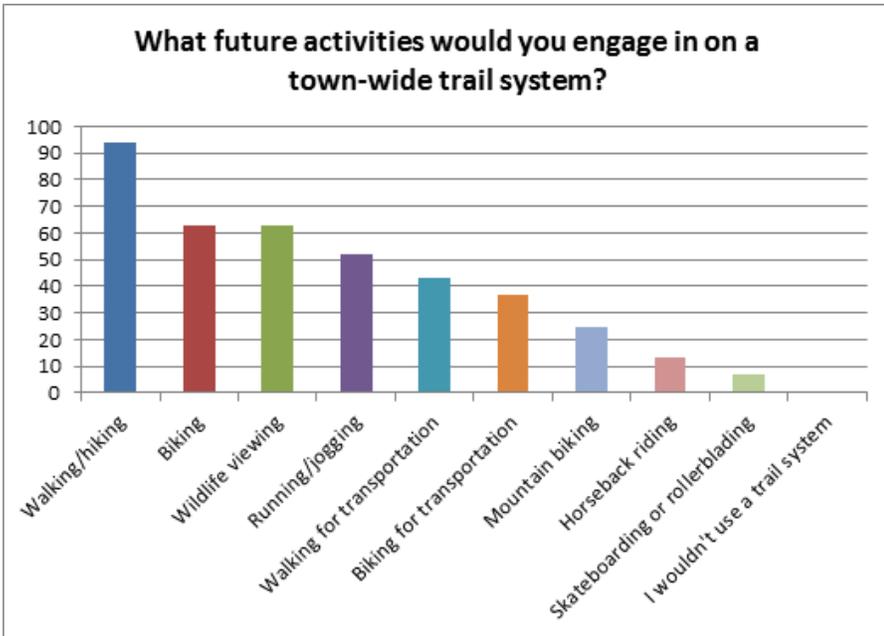
All but nine survey participants said they walk or hike on trails and 26% said they mountain bike.

The most common reasons people say they use trails are for exercise/physical activity, viewing nature, and fun.

72% of participants said they use the Cascade Trail. The most common reasons for why people don't use the trail are that it is too far away from their home or they are not familiar with it.



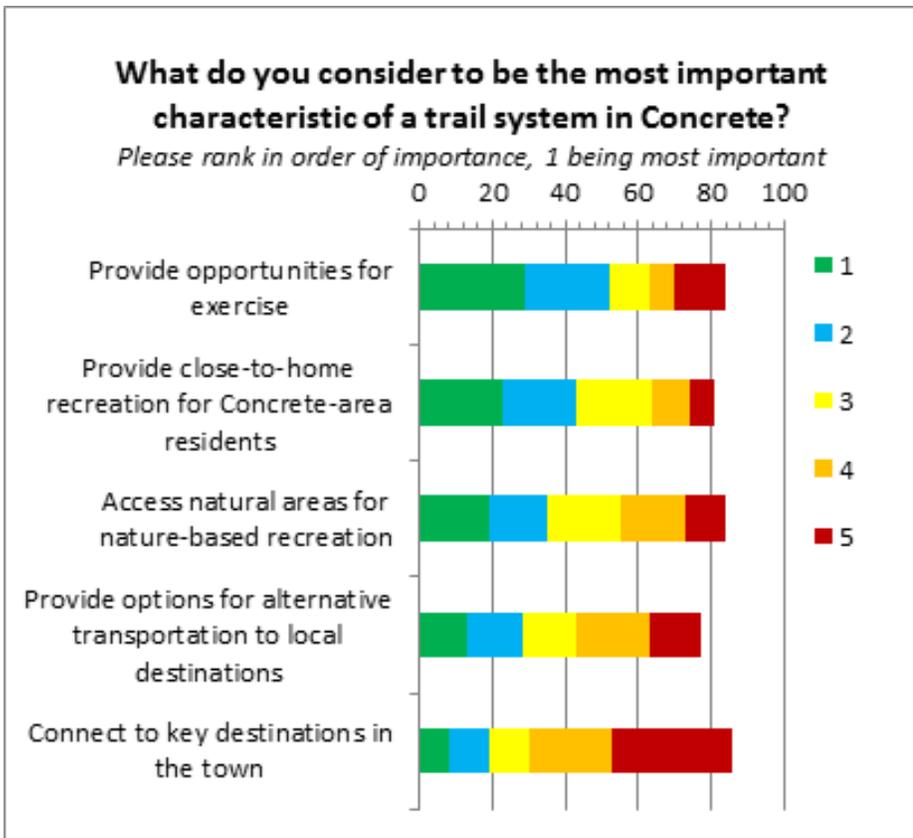
**Future trail use:**



The most common places participants listed they would like to see connected to a future townwide trail system included the Baker and Skagit Rivers, Concrete schools, Lake Shannon, Red Apple Market, and town parks.

Most participants said they want trails that are open to all non-motorized uses. 37% want some trails for foot traffic only and 23% want some trails for mountain biking only.

The most preferred type of trail surface for participants is compacted gravel. Benches, trash cans, educational signs, and signs pointing out destinations were the most popular amenities participants said they would like to see on the trail system.



Above: Two youngsters celebrating Fourth of July in Concrete

In conclusion: Reception from the public to the idea of an expanded trail system in the Town of Concrete and the surrounding area was very positive. Not only did people say they would use the trail system, they also saw the expanded trail system as an improvement to their livelihood and to the town's well-being.

## BENEFITS OF TRAILS



### HEALTH

- **Lower obesity and diabetes.** States where a higher percentage of people walk and bike to work have decreased rates of diabetes<sup>7</sup>, and U.S. cities with enhanced levels of active transportation experience 20% lower obesity and diabetes rates<sup>5</sup>.
- **Improved mental health.** Studies show that even as few as five minutes spent outdoors has distinct mental health benefits, including reduction of stress and depression, as well as improvement in self-esteem, creativity, and life satisfaction. These feelings were heightened for those who exercised in a wilderness area or near water<sup>6</sup>.
- **Improving air quality is good for human health.** Improving air quality decreases lung and heart disease, cancer, strokes, chronic obstructive pulmonary disease, asthma attacks and other respiratory illnesses.



### SAFETY

- **Walking and biking will be safer.** In the Federal Highway Administration's (FHA) Non-Motorized Transportation Pilot Program<sup>2</sup>, the FHA found that after implementing active transportation system upgrades, there was an average of a 20% decline in pedestrian fatalities and 28% decline in bike fatalities across the four pilot communities.
- **Safer neighborhoods.** As the trail system improves and more people use it, users will provide "eyes on the streets," making the community safer. Residents will also feel more invested in its care and condition.



### EDUCATION & EMPLOYMENT

- **Students hired to help build trails can learn trail skills and gain valuable work experience.** As they gain knowledge and steward the land, they will also garner an appreciation for the environment and can advocate for its protection in the future.
- **Trails can provide community service opportunities for local youth.** This will foster community connections and promote positive reinforcement for good behavior.
- **Interpretive signs placed along the trail can connect residents and visitors to local history and natural resources.**
- **Children that are physically active outdoors have higher academic achievements.** An active lifestyle allows children to stay alert and curious, and is good for brain development.
- **Recreation generates employment opportunities.** Washington State's recreation industry currently employs nearly 200,000 people.



## ECONOMIC

- **Recreation has a huge market.** Americans indicated that they would spend 22 percent of transportation funding on biking and walking infrastructure—about 15 times what is currently spent<sup>1</sup>. According to the *Economic Analysis of Outdoor Recreation Report* by Earth Economics, Washington State’s recreation industry generates \$21.6 billion dollars. Bicycle riding was the third largest activity by economic expenditures. Skagit County expenditures were \$479 million<sup>4</sup>.
- **Health care savings.** The annual medical costs of physical inactivity in the U.S. have been estimated at \$76 billion, or close to 10 percent of all medical expenses<sup>1</sup>. Other studies have shown that \$3 in health care costs can be saved for every \$1 spent on trails<sup>10</sup>. A healthier population also means reduced absenteeism in the work place.
- **Savings from decreased gas spending.** As more Concrete residents and visitors use the trail system, fewer vehicles will be driven and money will be saved from fueling those vehicles.
- **Local businesses will benefit.** Expenditures by commuters, recreationists and visitors will be spent locally on on equipment, rentals, food and drink, lodging, and transportation.
- **Increased property values.** Studies showed a 6% increase in property values located near trail systems<sup>11</sup>.
- **Tax revenue** (sales, property).
- **Employee and employer attraction.** Trails are ranked the 2nd most important community amenity according to a survey of recent homebuyers<sup>8</sup>.



## ENVIRONMENTAL

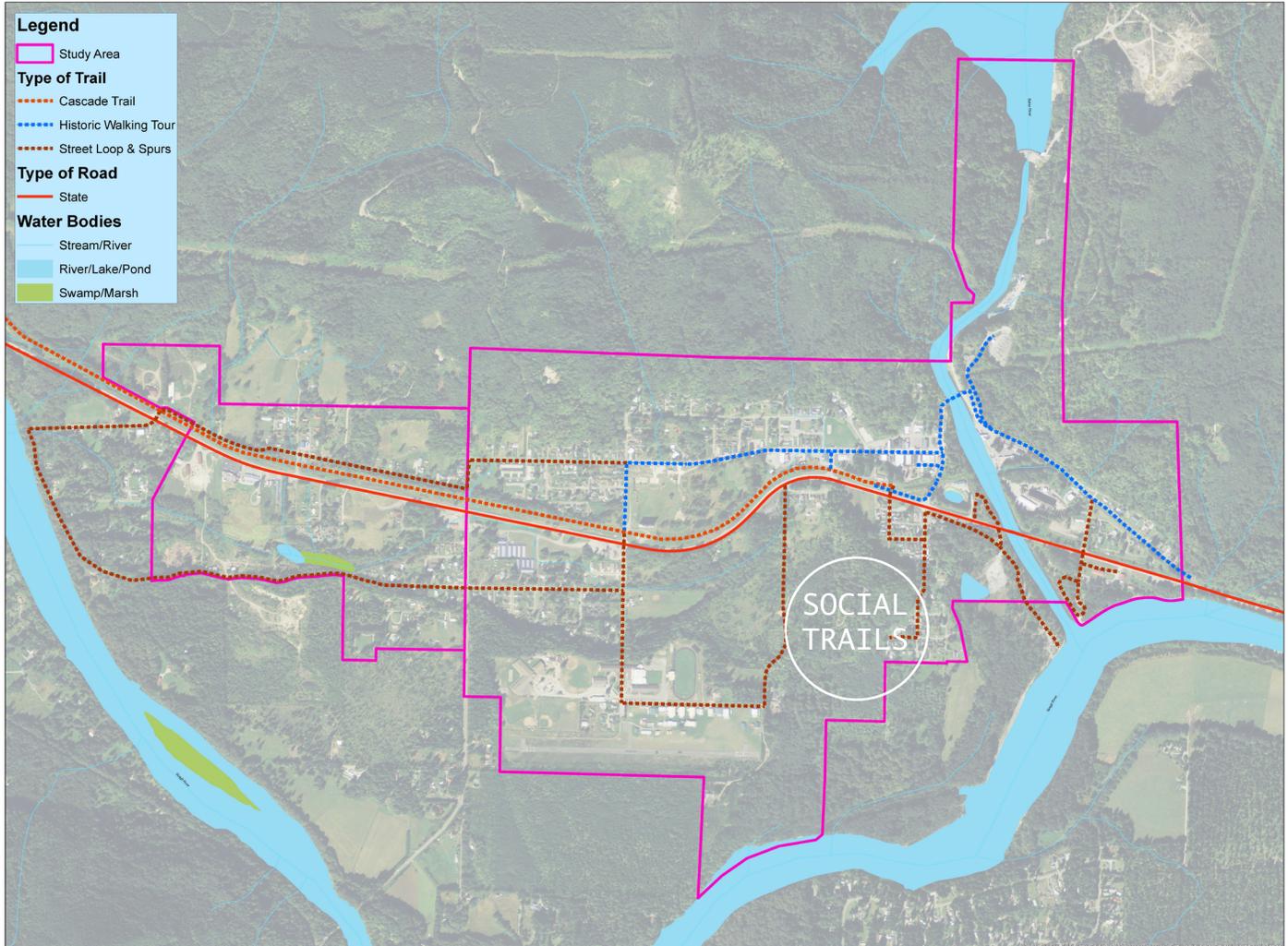
- **Residents in and around Concrete can reduce their carbon footprint.** In 2006, the Skagit County community emitted approximately 1,690,664 tons of CO<sub>2</sub>. Transportation accounts for nearly half of those CO<sub>2</sub> emissions<sup>9</sup>. Gasoline and diesel-powered vehicles are a major source of air pollution, including fine particulate matter and ozone. By driving less and using active transportation choices, vehicle emissions are expected to decrease and air quality improve.
- **Less traveling and less infrastructure, and more room for open space.** Public infrastructure investment that increases the numbers of bicyclists and pedestrians also stimulates local forms of compact, mixed-use development, which results in destinations that are closer to each other, thereby shortening travel distances for all modes<sup>1</sup>.
- **Cleaner air and water!**

# TRAIL SYSTEM CONCEPTUAL DESIGN CONCEPTS

Input from Trail Design Workshop

**DESCRIPTION OF DESIGN CONCEPT:** The Concrete Trail System is a network of trails that includes the Cascade Trail, Historic Walking Tour, and Street Loops and Spurs.

## Concrete Existing Trails Map (2015)



Above: The Concrete Trail System design workshop

The **Cascade Trail** is a non-motorized, 22.5-mile rail trail that follows the abandoned Burlington Northern grade and connects the town of Concrete to Sedro-Woolley.

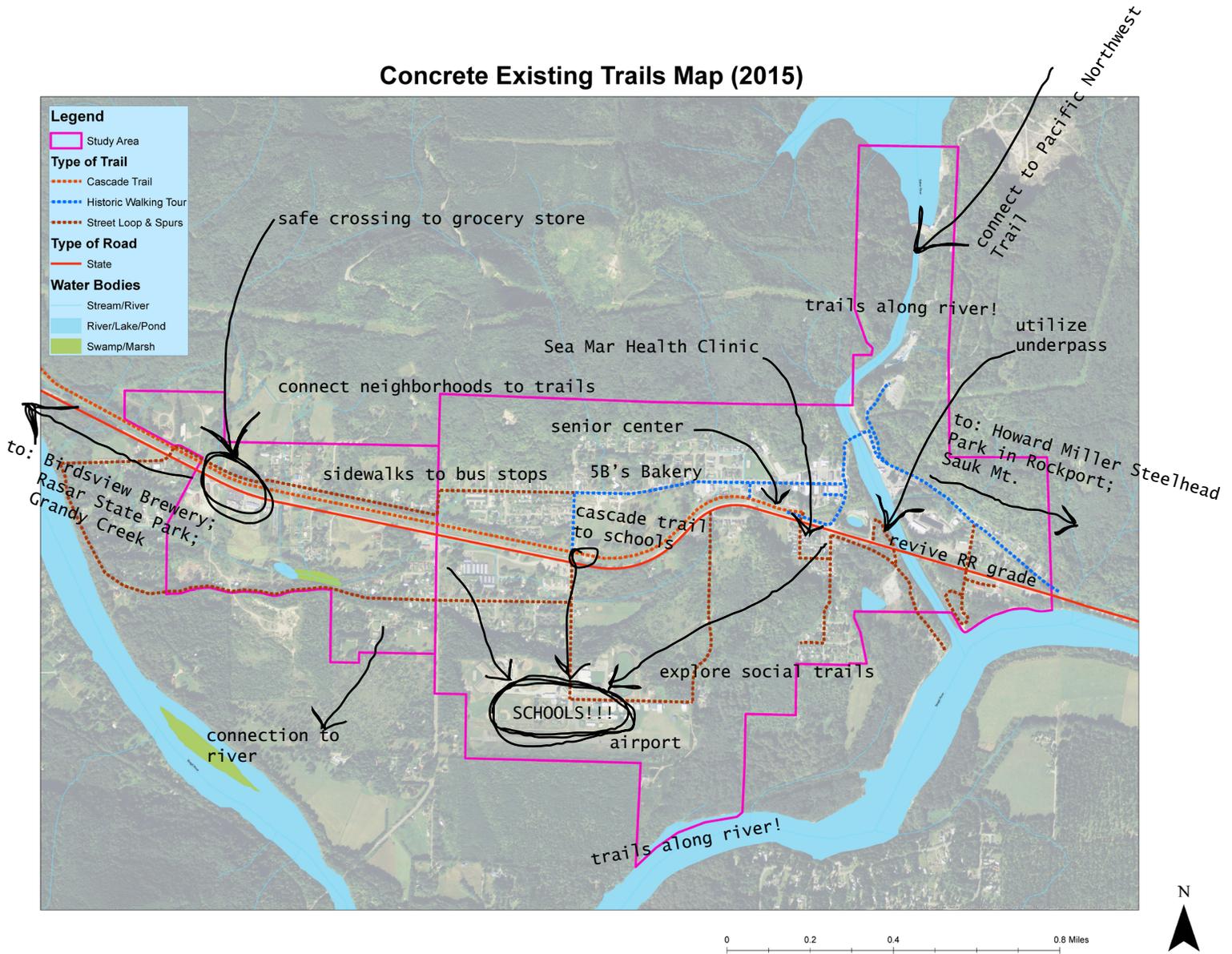
The **Historic Walking Tour** is an on-street trail that connects historic sites in Concrete, and the **Street Loops and Spurs** are on-street and off-street trails that are ideal walking and biking routes between community destinations.

**Social trails** are existing, non-sanctioned trails that are frequently used for foot traffic to Concrete schools and surrounding properties.

**Recommended Connections and Destinations:**

Participants at the design workshop were given maps and asked to specify places that they would like to see the trail connect to. They were asked to think about how they would use the trail and where they would like to go for work, school, play, shopping, etc. Below is a compilation of the input we received:

**Concrete Existing Trails Map (2015)**



**Suggested Improvements to Existing Trails:**

- Road markings to delineate US Bicycling route along highway 20
- Focus on trails that are of higher priority
- Informative signage on trails with maps
- Better delineation, buffer between existing trails and private property
- Safe pedestrian crossings
- Lower speed limit at Red Apple
- Pedestrian crossing over State Route 20
- Sidewalks along State Route 20



Above: Walking along the Cascade Trail.

### **Outreach and Education:**

- Concrete Trail System logo
- Posters and pamphlets for trails and places, distributed locally (Red Apple Market, library)
- App for GPS
- Map and information on the Concrete web site
- Facebook page for trail system with safety information



Above: Participatory sidewalk art at Cascade Days

### **Interpretive Art Opportunities:**

- Signage (historic walking route, to Town Center, easy/moderate/difficult routes, etc.)
- Garbage/recycling facilities
- Museum of Northwest Art—Concrete Summer Learning Adventure
- Connecting with local organizations
- Connecting with Concrete schools
- Sidewalk art for kids

### **Next Steps and Implementation:**

- Formation of a “Friends of Concrete Trails” group
- Monitoring and evaluation recommendations (bike/pedestrian counts)
- Informational interview with recreation and conservation office
- Apply for RTCA assistance in 1–2 years to request opportunity for WASLA design charrette—keep general to include other organizations for charrette

### **Maintenance Guidelines:**

- People-based (volunteer) opportunities and recommendations
- Management practices to be decided as trails are constructed

### **Funding and Connection Opportunities:**

- Opportunities with funding from relicensing of hydro dams
- Skagit County funding sources
- Other partners involved in this project will continually look for other opportunities to advance the project
- Incorporate ideas from Town of Concrete Shoreline Restoration Plan
- Incorporate ideas from Skagit County UGA Open Space Concept Plan (SCOG)

## SAFE ROUTES TO SCHOOL

Safe Routes to School (SRTS) programs are sustained efforts by schools, communities, and government agencies committed to improving the health and wellness of their local students by enabling and encouraging them to walk and bicycle to school.

This is achieved in part through direct education, such as teaching kids to look before crossing, or how to ride a bicycle.

Environmental projects that work to improve safety and accessibility, and reduce traffic and vehicle emissions in school zones, are also included.

*“Learning how to walk and bike safely is a skill that will benefit students for a lifetime. Walking and biking can benefit both students’ physical and emotional health, and can help students be better learners. Having children walk and bike to school can reduce congestion near the school and greenhouse gas emissions. At a time when more of our young people are suffering from obesity, and we need to consider the effects of greenhouse gases, what better action can we take than getting them moving by bicycle or foot—if it’s safe?”*

(<http://www.saferoutesinfo.org/>)

SRTS programs examine conditions and conduct projects and activities in the vicinity of schools. These efforts strive for improved safety and accessibility, and for reduced traffic and air pollution.

Concrete School District is actively seeking funding from SRTS to enhance physical activity, commuter safety, and environmentalism.

In Skagit County, SRTS programs in Mount Vernon and Sedro-Woolley have increased the number of students walking and biking to school by coordinating neighborhood-based walking school buses, securing funding to build or extend sidewalks near schools, conducting school-based pedestrian/bicycling safety and skills education, and promoting “Walk and Bike to School Week” each spring.

The goal of SRTS programs is to make bicycling and walking to school safer and more appealing, thus encouraging a healthy and active lifestyle from an early age.



Above: Walking school bus in Mt. Vernon. Photo by: Liz McNett Crowl

**Successful programs incorporate the four E's:**

- Encouragement
- Enforcement
- Engineering
- Education

# **Section III: Resources**

## WORKS CONSULTED

“North Cascadian Travelers’ Guide,” 2015. Concrete Herald.

Dwelley, Charles M. So They Called The Town “Concrete.” Concrete Heritage Museum. May, 1980.

[Coastal Salish Map](#). January 17, 2016.

**1** [Active Transportation for America: The Case for Increased Federal Investment in Bicycling and Walking](#), Rails to Trails Conservancy, 1/1/2008.

**2** Federal Highway Administration, [Non-motorized Transportation Pilot Program: 2014 Report](#).

**3** [Cascade Trail](#), Rails-to-Trails Conservancy.

**4** [Economic Analysis of Outdoor Recreation in Washington State](#), Earth Economics. January, 2015.

**5** Pucher et al., [Walking and Cycling to Health: A Comparative Analysis of City, State, and International Data](#). 2010.

**6** Barton and Pretty, [Walking and Cycling to Health: A Comparative Analysis of City, State, and International Data](#). 2010.

**7** National Walking and Bicycling Alliance, [The Alliance Benchmarking Report](#). 2014.

**8** [Benefits of Trails and Greenways](#), AmericanTrails.org.

**9** [Skagit County Climate Action Plan](#), Skagit County. March 16, 2010.

**10** [The Power of Trails for Promoting Physical Activity in Communities](#), Active Living Research, Jan. 2011.

**11** Rivers, Trails and Conservation Assistance program of the National Park Service. “Economic Impacts of Protecting Rivers, Trails, and Greenway Corridors.” Resource Book, 1995.

## APPENDIX

### 2014 Healthy Youth Survey Data

The Healthy Youth Survey (HYS) is a collaborative effort of the Office of the Superintendent of Public Instruction, the Department of Health, the Department of Social and Health Service's Division of Behavioral Health and Recovery, and the Liquor and Cannabis Board.

The survey provides important information about youth in Washington. County prevention coordinators, community mobilization coalitions, community public health and safety networks, and others use this information to guide policy and programs that serve youth. The information from the Healthy Youth Survey can be used to identify trends in patterns of behavior over time. In October 2002, 2004, 2006, 2008, 2010, 2012 and 2014, students in grades 6, 8, 10, and 12 answered questions about safety and violence, physical activity and diet, alcohol, tobacco and other drug use, and related risk and protective factors.

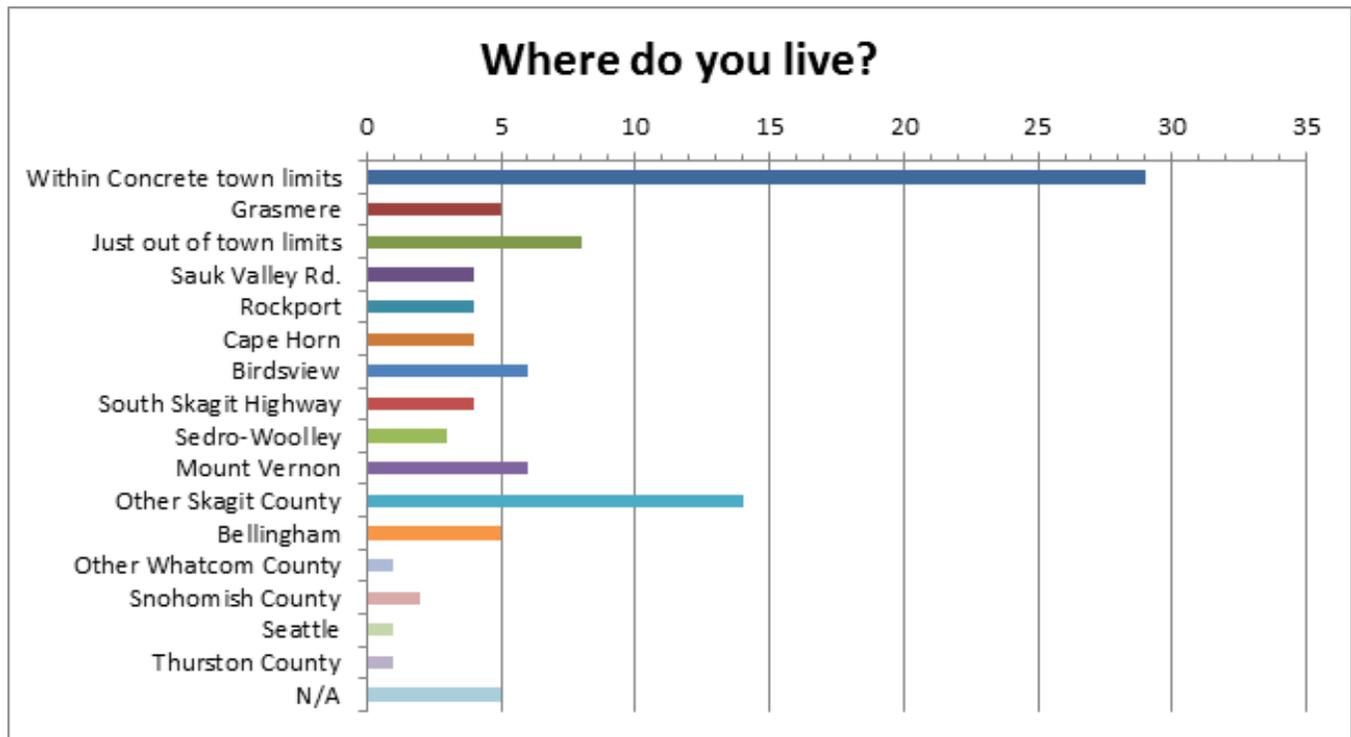
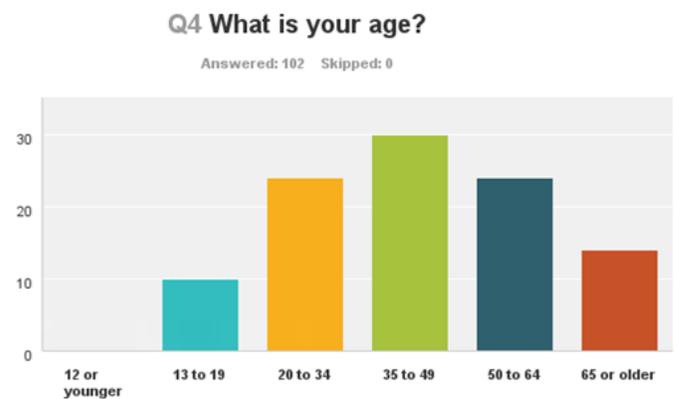
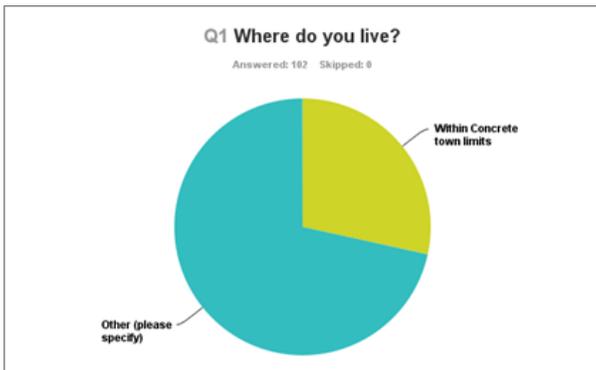
<http://www.doh.wa.gov/DataandStatisticalReports/DataSystems/HealthyYouthSurvey>

<b>Indicator</b>  <i>(current use defined as within last 30 days)</i>	<b>2014 Healthy Youth Survey Data</b>	
	<b>Concrete School District</b>  Grades 8 and 10 (combined)	<b>Washington State</b>  Grades 8 and 10 (combined)
<b>Current Tobacco Use</b>	<b>16%</b>	<b>7%</b>
<b>Current Marijuana Use</b>	<b>17%</b>	<b>13%</b>
<b>Current Alcohol Use</b>	<b>18%</b>	<b>14%</b>
<b>Parental Attitudes Tolerant of Substance Use</b>	<b>34%</b>	<b>31%</b>

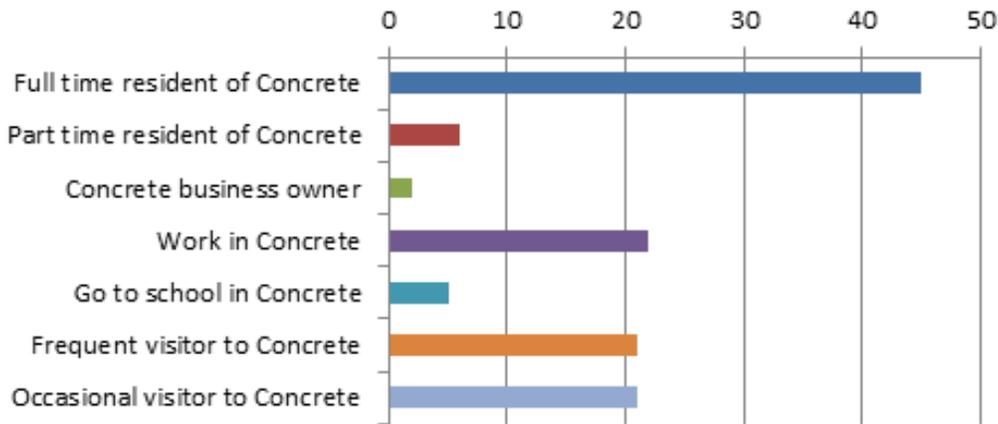
## Town of Concrete Trail System Survey Results

**Distribution:** The Concrete Trail System Committee created the Concrete Trail System Survey in June, 2015. They distributed the six-page survey both online and on paper. A link was posted multiple times via Mayor Miller and the Concrete Herald’s Facebook pages. Volunteers asked students to fill out the survey at Youth Activity Day on July 9. Surveys were also distributed to key locations throughout town where citizens and visitors could fill them out and submit them through collection boxes. Locations included the Concrete Library, Red Apple Market, 5b’s Bakery, and Annie’s Pizza Station. The survey went live on Friday, June 26, and was open through Friday, August 7.

**Demographics:** 102 people completed the survey. Of those, 29 live within Concrete town limits and 87 live within Skagit County. Survey participants spanned all ages, with the exception of children 12 and under. The majority of participants were middle-aged.



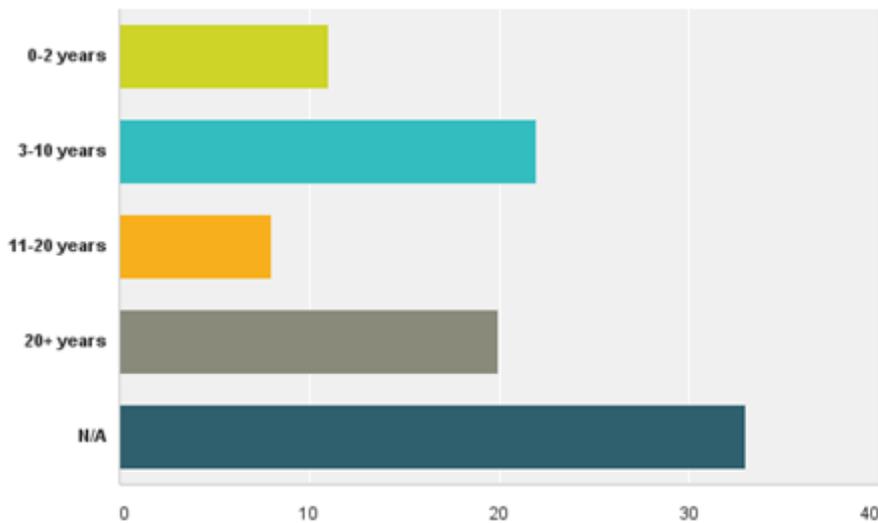
## What is your relationship with Concrete?



Nearly 50% of participants consider themselves full time residents of Concrete and 23% work in Concrete.

## Q3 If applicable, how long have you been a resident of Concrete?

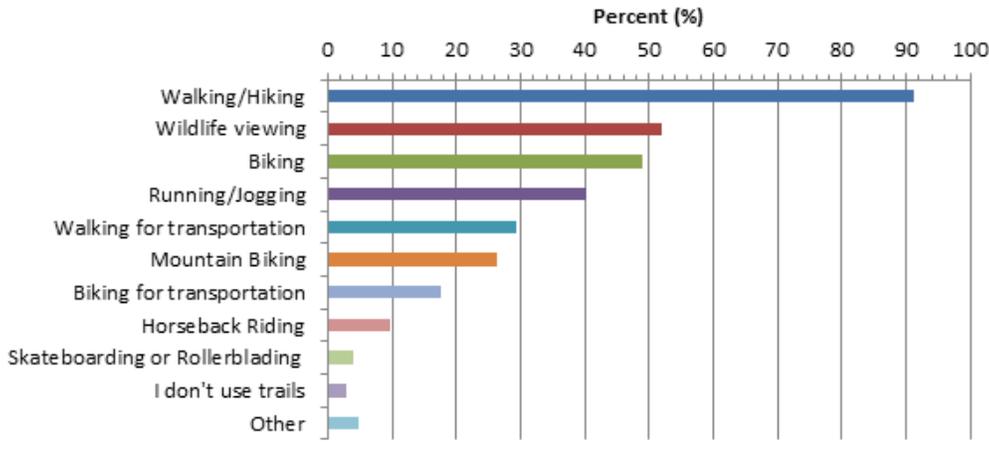
Answered: 94 Skipped: 8



Of the participants who are Concrete residents, 20% have lived there for 0 to 2 years, 36% have lived there for 3 to 10 years, 13% have lived there for 11 to 20 years, and 33% have lived there for more than 20 years.

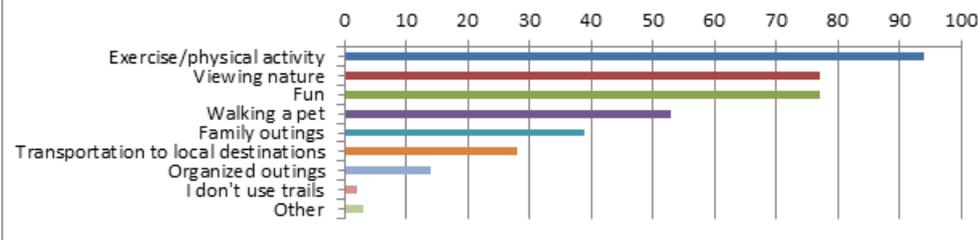
## What activities do you currently do on non-motorized trails?

Current trail use: Walking/hiking, wildlife viewing, and biking are the most common trail activities in which people participate. All but nine survey participants said they walk or hike on trails.



Surprisingly, 26% of participants (27 people) said they mountain bike. Other trail activities respondents said they participate in included geocaching, hunting, physical therapy, visiting with locals, and making videos.

## Why do you use non-motorized trails?



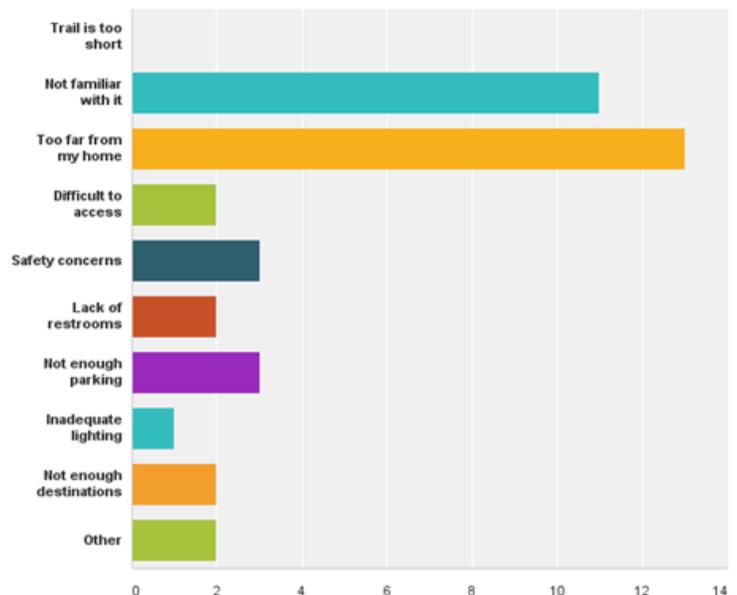
**The most common reasons people say they use trails is for exercise/physical activity, viewing nature, and fun.**

Seventy-two percent of participants said they use the local Cascade Trail, a 22.5-mile rail trail that goes from Sedro-Woolley to Concrete. The most common reason for why people said they do not use the Cascade Trail is that it is too far away from their home or they are not familiar with it.

In addition to people responding that the Cascade Trail is difficult to access, they also feel that it has safety concerns, lacks restrooms, doesn't have enough parking, has inadequate lighting, and doesn't have enough destinations along the route. A participant also responded that the trail has a "lousy gravel bed" and is "too hard to bike."

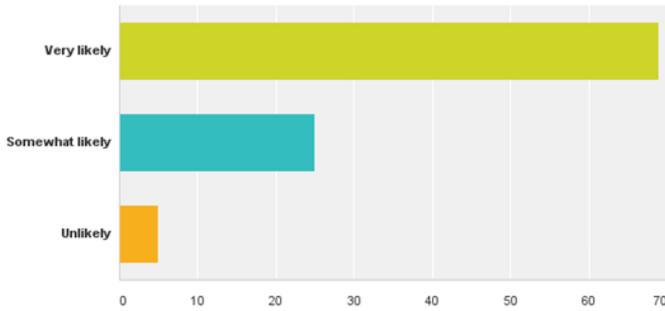
## Q8 If you do not use the Cascade Trail, why not?

Answered: 27 Skipped: 75



**Q9 How likely is it that you or someone from your family would use an expanded non-motorized trail system in the Concrete area?**

Answered: 99 Skipped: 3

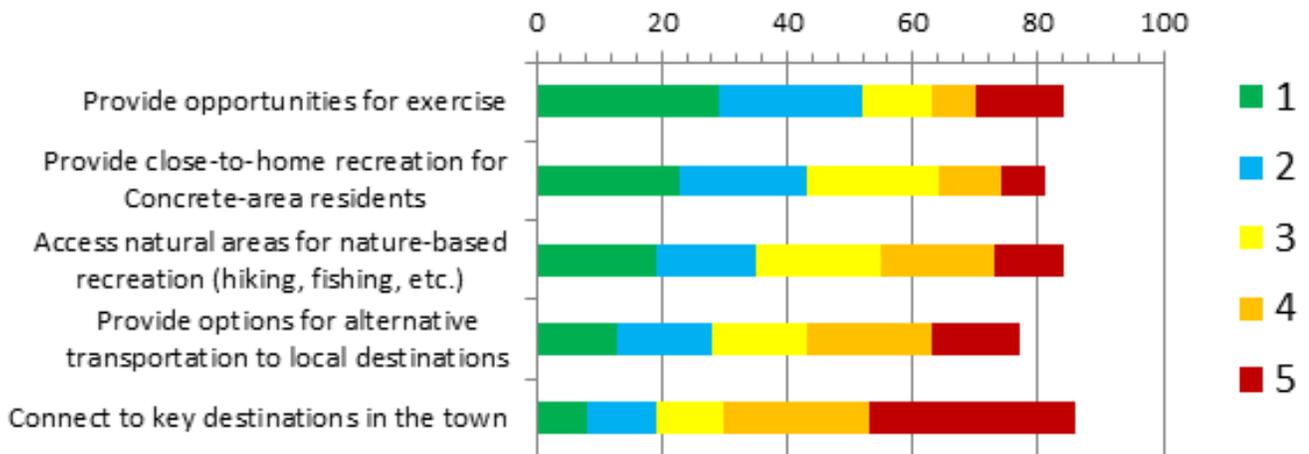


**Future trail use:** The vast majority of survey participants (70%) said it is very likely that they or someone from their family would use an expanded non-motorized trail system in the Concrete area.

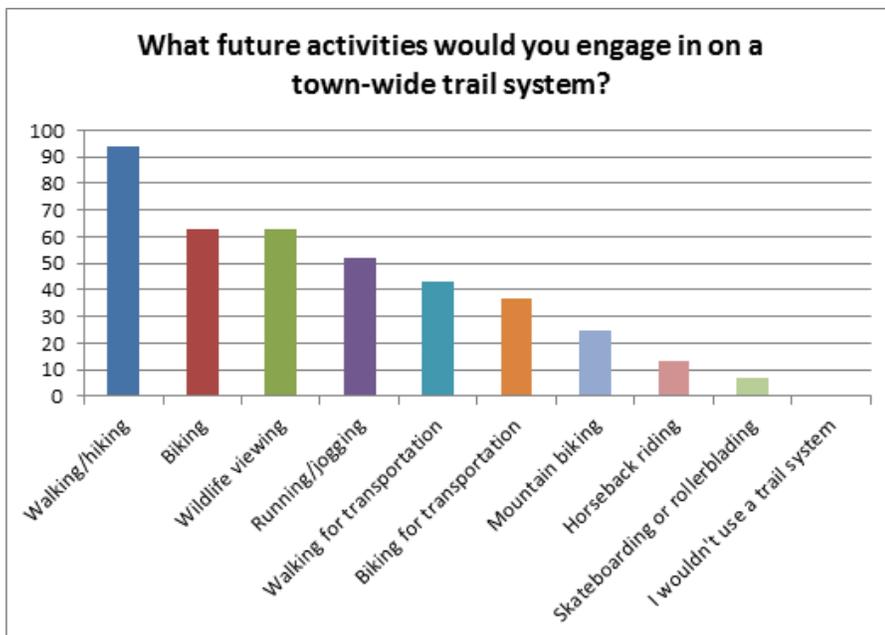
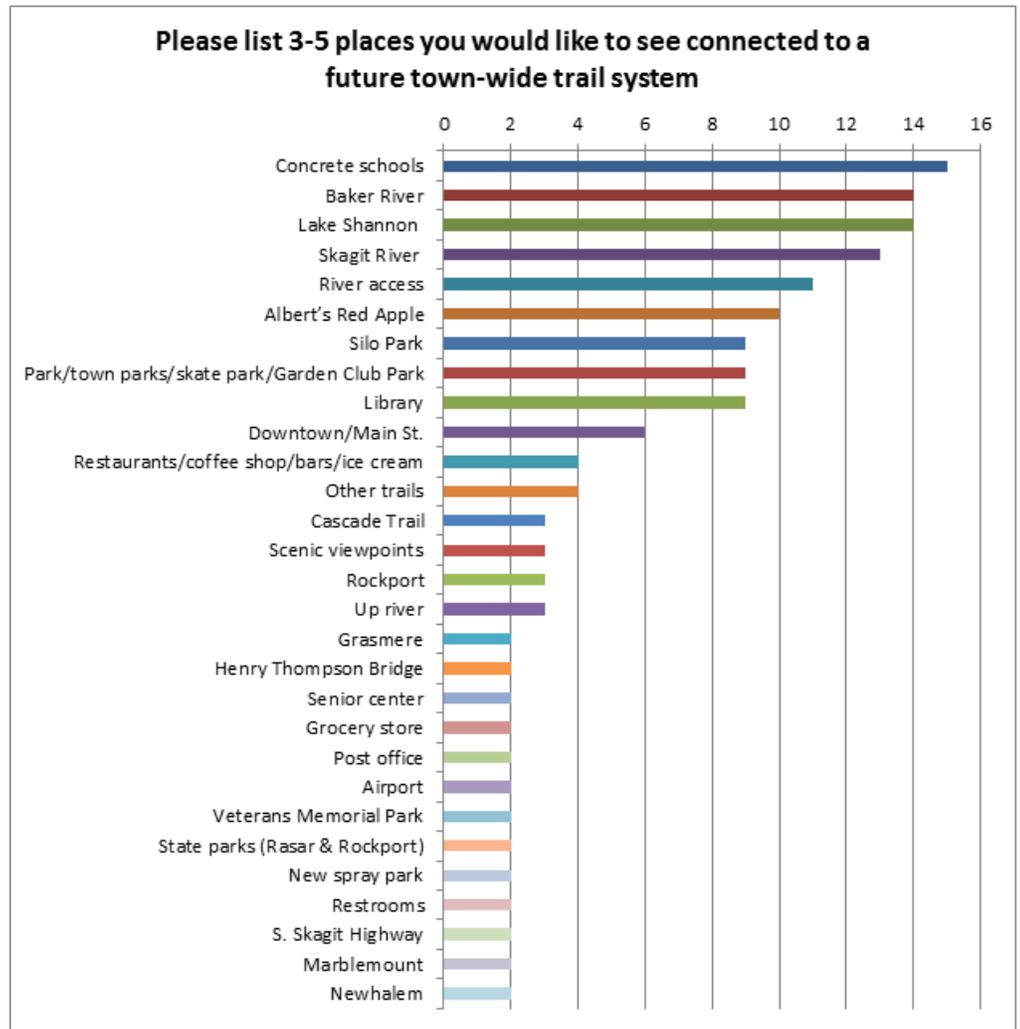
Participants said the most important characteristics of a trail system in Concrete are that it provides opportunities for exercise and it provides close-to-home recreation for Concrete-area residents. They said the least important characteristic of a trail system in Concrete is that it connects to key destinations in town.

**What do you consider to be the most important characteristic of a trail system in Concrete?**

*Please rank the following in order of importance, with 1 being most important*



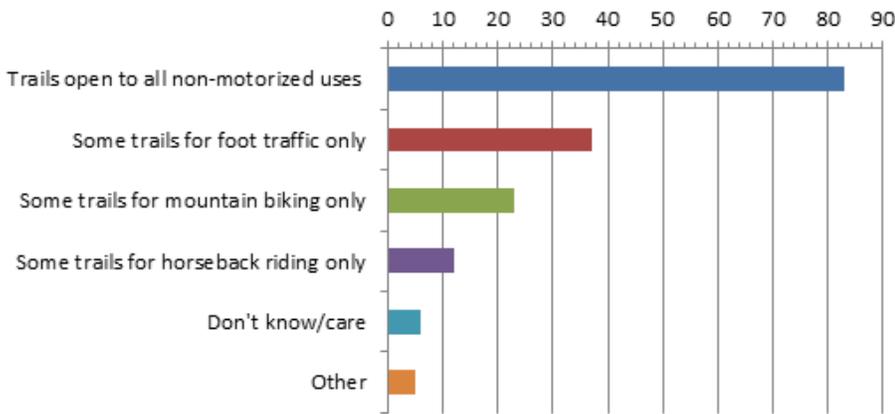
The most common places participants listed they would like to see connected to a future town-wide trail system included the Baker and Skagit Rivers, Concrete schools, Lake Shannon, Red Apple Market, and town parks.



Walking/hiking, biking, wildlife viewing, and running/jogging were the most popular activities survey participants said they would engage in on a town-wide trail system.

No one said that they wouldn't use a town-wide trail system.

### What types of uses would you like to see future trails support?



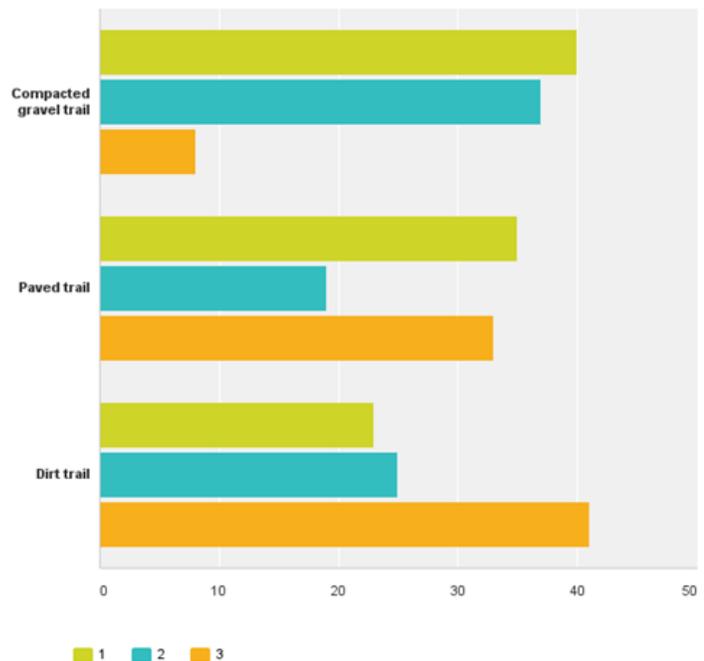
Most participants (84%) said they want trails that are open to all non-motorized uses. Thirty-seven percent want some trails for foot traffic only, 23% want some trails for mountain biking only, and 12% want trails for horseback riding only.

Other types of uses participants said they'd prefer included trails open to hiking and biking but not horseback riding, trails open to electric bikes, handicap friendly trails, and downhill mountain biking trails.

The most preferred type of trail surface for participants is compacted gravel trail. Forty percent said compacted gravel is their top choice of surface. Paved trails were second most popular and dirt trails were least popular. Only nine participants listed compacted gravel as their last choice of trail surface type.

### Q14 What type of trail surface do you prefer? Please rank the following in order of preference, with 1 being most preferred.

Answered: 99 Skipped: 3

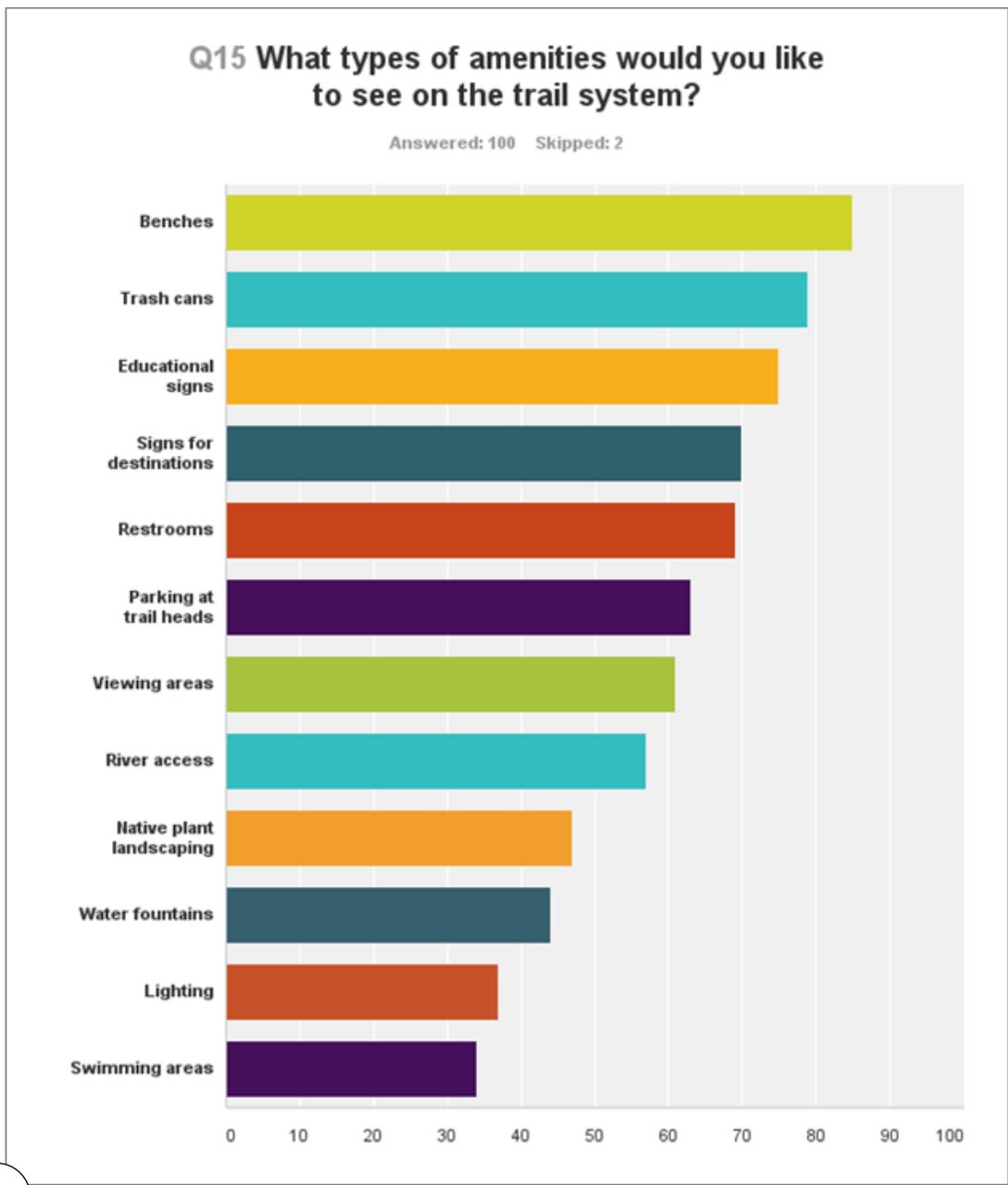


Survey participants were asked to write any other thoughts or suggestions they have about developing a trail system in Concrete. Five people mentioned that the trail system is a great idea and one person painted an optimistic view of current trail popularity, writing, "Clearing larger/longer areas of trail breeds further development and a culture of exercise. Simply put, I've seen more 'riders' around town this past couple of weeks than the last five years combined. The culture is growing... now it just needs growth."

Several people suggested improvements to the Cascade Trail. Three people said the trail should be paved, especially through Concrete. Others mentioned that the current trail is difficult to access for people with electric wheelchairs, strollers, and road bikes. Another said they want the trail to be "more handicap-friendly, safer, more lights, more signs, and easier to access." Similarly, one person suggested that big plants be cleared so the trail can be seen from the road for safety reasons. Another suggested the trail be extended east to Rockport. One person said the trail should allow electric bikes. Finally, one person said they use the trail frequently and love it but would appreciate it having restrooms every few miles.

Other amenities that were suggested for the trail system in general included distance signs, “pick up dog poop” signs and dog poop bags, benches, mounting blocks along the trail to help you get back on your horse, connections to swimming holes, and parking. Restrooms were also suggested, but another person said they don’t want restrooms on trails—they’re too smelly. Two people said the trail system should have a leash law. One person said, “deciduous trees that are colorful in the fall and others that bloom in the spring should be planted along the trail.” They also suggested planting meadows of wildflowers. Safety was an important topic for a couple people. One said that the trail committee needs to find a way to prevent criminal activity. Another said, “better surveillance and feeling of ‘security’ would be nice on future trails.” The same person wanted “some sort of prevention towards homeless people setting up camp.”

A few specific trail routes were suggested. One person wants a loop trail through Silo Park and another wants to connect the trail system to the south side of the Skagit River. Another wants trails to go through wilderness. Two people said the committee should build a mountain bike course in or around Concrete; they both mentioned that this would be a great tourist draw and might even attract people to move to Concrete. Others generally mentioned they want some paved trails or that they want “a multi-use trail that accommodates pedestrians, bicyclists, and equestrians and is a combination of paved and unpaved.”



Benches, trash cans, educational signs (about local history, the environment, etc.), and signs that point out destinations (like parks and local businesses) were the most popular amenities participants said they would like to see on the trail system.

Restrooms, parking at trailheads, and viewing areas were also popular.

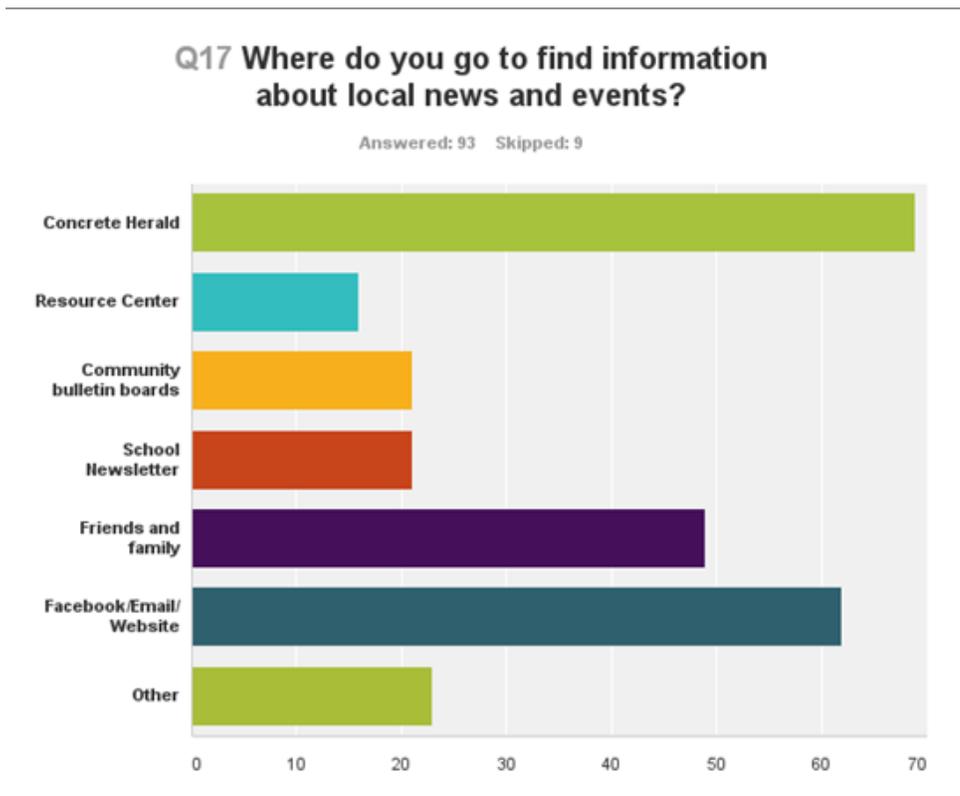
Swimming areas, lighting, and water fountains were the least popular amenities.

When asked how they heard about the Concrete Trails Committee, nearly half (47%) of participants said they heard about it through Facebook. The survey was posted on the Concrete Herald’s and Mayor Miller’s Facebook. Nineteen percent of people heard about the trails committee from some “other” means. These included from a friend or family, paper survey found at a store or other establishment, Youth Activity Day, the Mount Vernon Trail Builders, and a chamber of commerce meeting. Fifty-two survey participants wanted to receive news/updates, volunteer opportunities, and event notices from the Concrete Trails Committee.



When asked where they go to find information about local news and events, people most-frequently said they use the *Concrete Herald*, followed by Facebook groups/email lists/websites, followed by friends and family.

People also find information from other newspapers (especially the *Skagit Valley Herald*), the library, and the radio.



In conclusion, **reception from the public to the idea of an expanded trail system in the Town of Concrete and the surrounding area was very positive.** Not only did people say they would use the trail system, they also saw the expanded trail system as an improvement to their livelihood and to the town’s well-being.



**The  
Concrete Trail  
System  
Concept Plan**