

## **Chapter 6. TRANSPORTATION**

### ***Introduction***

The Transportation Element has been developed in accordance with the Growth Management Act to address the motorized and non-motorized transportation needs of the Town of Concrete. It represents the community's policy plan for the next 20 years.

The Transportation Element has also been developed in accordance with the county-wide planning policies, and has been integrated with all other planning elements to ensure consistency throughout the Comprehensive Plan. The Transportation Element specifically considers the location and condition of the existing traffic circulation system; the cause, scope, and nature of transportation problems; the projected transportation needs; and plans for addressing all transportation needs while maintaining an established level of service standards.

### **Major Transportation Consideration and Goals**

The relationship between transportation and land use is one of continuous interaction and their planning must be coordinated. The Comprehensive Plan Map, the Land Use Element, and the Transportation Element are highly dependent on each other and need to be carefully coordinated.

For additional information about regional transportation, refer to the following Washington State Department of Transportation (WSDOT) documents:

- Washington State Transportation Commission- Washington Transportation Plan, <http://www.wstc.wa.gov/wtp/>
- Highway System Plan, <http://www.wsdot.wa.gov/planning/hsp.htm>
- SR 20 North Cascades Scenic Byway Corridor Management Plan, Cover page below
- Washington State Public Transportation Plan <http://www.wsdot.wa.gov/transit/transportationplan/>
- Washington State Freight System Plan, <http://www.wsdot.wa.gov/Freight/systemplan.htm>
- Washington Aviation System Plan, <http://www.wsdot.wa.gov/aviation/Planning/>
- SR 20 North Cascades Scenic Highway Milepost 66.29 to Milepost 204.09 Corridor Management Plan; December 1999; Washington State Department of Transportation.

Similar to all of the other elements in the Town's Comprehensive Plan as discussed in Chapter 1 the Transportation Element must be consistent with Countywide Planning Policies. In addition the Transportation Element must also be consistent with the Skagit Transit Development Plan, SCOGs Skagit 2040 Regional Transportation Plan, and with the comprehensive plans of neighboring jurisdictions with which it shares facility connections—in Concrete's case Skagit County's Comprehensive Plan. Those plans have been reviewed and no specific inconsistencies were identified that the Town would need to address. It should however be noted that the Skagit Transit Plan and the Skagit 2040 Regional Plans both need to be updated to reflect the new Park and Ride facility that the Town has added and to reflect changes at Mears Field that are discussed below.

## *Transportation Goals and Policies*

**Goal T-1: To provide a transportation system that is compatible with the needs of the community, coordinated with the regional road network and consistent with comprehensive plans.**

Policy T 1.1: Improve and maintain the Town's road network and ensure that changes are consistent with the regional road network by coordinating with the county and the state.

Policy T 1.2: Endeavor to establish a regional transportation system by cooperating and working with SKAT, SCOG the regional transportation planning organization (RTPO), Washington State and municipalities. The regional system shall function in a manner that promotes the following:

- Energy efficiency
- Financial efficiency
- Environmental protection

Policy T 1.3: Regional transportation facilities shall be consistent with county-wide and bi-state air, land and water resource goals and policies.

Policy T 1.4: Optimize the use of and maintain existing roads to minimize the construction costs and negative impacts on the environment and community associated with roadway facility expansion.

Policy T 1.5: Establish roadway design and level of service standards, and functional classification schemes.

Policy T 1.6 Address pedestrian and bicycle safety by:

- providing safe and adequate walking and biking facilities to and from transit stops and schools;
- placing transit stops in locations that encourage safe boarding's and deboarding's;
- coordinating non-motorized recreational and commuter facilities; and
- addressing the link to public transportation.
- require development to provide frontage improvements to address pedestrian connectivity

**Goal T-2: To establish 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.**

Policy T 2.1: Improve existing trails and create new trails in and near the Town of Concrete, eventually connecting to existing trail systems on adjacent public lands.

Policy T 2.2: Create a well-publicized trail system that is a source of pride to eastern Skagit County residents

Policy T 2.3: Connect community members and visitors to key destinations within and around town, and provide opportunities for social connectedness among community members.

Policy T 2.4: 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.

Policy T 2.5: Strengthen partnerships and generate new opportunities to work with nonprofit partners from recreation, health, community development, education, and other sectors

Policy T 2.6: 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

Policy T 2.7: Enhance tourism to benefit the local economy

Policy T 2.8: Highlight the natural and cultural history of the town and region

Policy T 2.9: Enhance connectivity between Concrete, neighboring communities, and natural amenities

Policy T 2.10: Establish a "Friends of Concrete Trails" group and engage community members, especially youth, in the civic process through the trails system project.

**Goal T-3 Provide for safe and efficient motorized, non-motorized and pedestrian traffic movement through all areas of town, including senior citizen and handicapped barrier-free access.**

Policy T 3.1 Encourage through-streets in new development wherever possible.

Policy T 3.2 Properly post dead-end streets to eliminate confusion.

Policy T 3.3 Ensure pedestrian and bicycle paths are safe, easily accessed, and signed.

Policy T 3.4 Maintain all existing streets and sidewalks in good repair at all times.

Policy T 3.5 Develop a comprehensive plan for all non-motorized transit.

Policy T 3.6 Encourage access for low-impact transportation, such as bicycles and wheelchairs, through the provision of pedestrian walkways throughout town and along the shoreline.

Policy T 3.7 Work with Skagit Transit to provide effective, accessible, and convenient transit services to Concrete residents, including the elderly, youth, low-income, and disabled. Transit facilities (stations, park-and ride lots, shelters, etc.) should be easily accessible to pedestrians, including those with disabilities, and convenient to local access points and services.

Policy T 3.8 Support regional non-motorized efforts including the annual pedestrian and bicycle count program.

**Goal T-4 Identify transportation routes and management needs to meet current and future demands.**

Policy T 4.1 Maintain established truck routes with appropriate signage.

Policy T 4.2 Encourage joint use of transportation corridors for utility purposes.

Policy T 4.3 Protect residential areas from commercial transportation impacts.

Policy T 4.4 The Town of Concrete recognizes SR 20 as a highway of statewide significance connecting eastern and western Washington. SR 20 has a state adopted level of service standard of “C.”

Policy T 4.5 Work with Washington State Department of Transportation (WSDOT) to develop a design plan for SR 20 that enhances the aesthetics of the highway consistent with the small-town character of the Town.

Policy T 4.6 Coordinate with WSDOT to manage land development and local street access along SR 20 to protect the functional viability of the highway and to support economic development.

Policy T 4.7 Coordinate with WSDOT and the County on improvements to SR 20 necessary to maintain highway functionality at the state-adopted LOS.

Policy T 4.8 Coordinate with Skagit County on improvements in areas where Town and County facilities join to maintain functionality at adopted LOS.

Policy T 4.9 The Town will continue to regularly update its Capital Facilities Element to maintain a funding strategy for transportation improvements. Recognizing that the funding will likely require grant funding to complete. The timing of grant funds can be unpredictable. Project timelines may be pushed forward or back depending on grant availability. In the event that grant funding is not available or insufficient to complete a project, it will be reevaluated.

- Policy T 4.10      Reassess land use and transportation assumptions if the LOS standards cannot be maintained due to funding short falls.
- Policy T 4.11      Ensure that the density and intensity of new development are compatible with the level of existing or planned public facilities that is necessary to support such development.
- Policy T 4.12      New development shall be allowed only when and where such development can be adequately served by public services and utilities without reducing service below adopted levels of service, provided that the development shall not be prohibited if it would violate the constitutional property rights of the applicant.

### ***Concurrency***

The Transportation Element contains the Town of Concrete’s plan to provide specified levels of transportation service in a timely manner. The level of service standards that are adopted in this plan will be maintained through upkeep of the existing circulation system and expansion of transportation services where needed. The Town has adopted link based level of service standards for the arterials which handle the most significant traffic volumes in the Town. The process of establishing level of service standards requires the Town to make quality of service decisions explicit. As specified in the Growth Management Act, new developments will be prohibited unless transportation improvements or strategies to accommodate the impact of development are made concurrently with the development. Such improvements and strategies will be in place or financially planned for within six years of development use.

### ***Inventory and Analysis***

The inventory presented in this element provides information useful to the planning process. This transportation element addresses all public roads located within the Town. Information on existing roadway functional classifications and accident frequency data was collected from the Skagit Council of Governments (SCOG). Existing roadway counts were collected in 2018. The inventory includes the following:

- (1) Location and Integration of Existing Transportation
- (2) Method for Assessing capacity of the Transportation System
- (3) Capacity of the Existing Transportation System

### **Traffic Circulation within the Town**

The Town of Concrete lies approximately 30 miles east of Interstate 5 on the North Cascades Highway (SR 20) at mile post 88 - 90. The Town is divided by SR 20 running west to east and the Baker River running north to south. The town lies north of the Skagit River.

Traffic to and from Concrete is primarily from SR 20 - east and west, and secondarily from the south of the Skagit River via the Concrete-Sauk Valley Road. The two major entries into the

downtown area are via Superior and ‘E’ streets. A secondary entrance is along Dillard Avenue. Superior and ‘E’ streets are west of the downtown area while Dillard is on the east fringe. A major east - west route is Main Street which connects the downtown area with the entry streets and residential areas.

The schools are located south of SR 20 along Superior Avenue. The SR 20/Superior intersection is the most significant intersection in the Town.

### **Natural Traffic Barriers**

The Skagit River has one bridge crossing on the Concrete-Sauk Valley Road between the city of Sedro-Woolley 25 miles west and at Rockport on the Sauk Valley Road eight miles east. Most of the north side of Concrete consists of steep slopes with historically sensitive soils. The Burpee Hill Road travels to the north linking to Baker Lake Road.

### **Adequacy of Parking Facilities**

The downtown area is a combination of on-street parallel parking, and diagonal parking, and one public parking lot. The public parking lot has 28 parking spaces.

In addition to the downtown parking discussed previously the Town has a park and ride lot located on North Superior Street. The park and ride includes 40 spaces. Parking is limited to 72 hours. The facility also provides parking for Silo Park; the Splash Park; and the Community Gardens.

### **Transit Services**

Skagit Transit Route 717 Sedro-Woolley/Concrete serves the Town with 3-hour headways during the weekday and one AM and PM trip each on Saturdays. The route travels on SR 20 and with stops at the park and ride on Superior Avenue and City Hall.

In addition the Sauk-Suiattle Indian Tribe’s DC-Direct Shuttle Bus Service is also available to the Town of Concrete. The DC-Direct Shuttle Bus Service is a public transportation program operated by the Sauk-Suiattle Indian Tribe committed to providing safe, reliable, and courteous transportation to all residents of the reservation, the rural towns of Darrington, Concrete, Rockport and all communities from Darrington to Concrete on SR 530 and 20. Its services include:

- Fixed Route Service, Monday –to- Friday from 6:00 am – 6:00 pm
- A fourteen (14) Passengers Bus with a Wheel Chair Lift (2 Wheel Chairs)
- SSIT Reservation, the Town of Darrington and the Town of Concrete
- Connects to Route 230 Community Transit and Route 717/8 Skagit Transit

### **Railways**

The Burlington Northern Railroad at one time extended service from Sedro-Woolley to Concrete. Closure of the lime kilns in Concrete reduced the need for heavy rail to Concrete. The rail rights-of-way parallel SR 20 to the north. Skagit County constructed a non-motorized trail on the old rail line that extends from Sedro-Woolley, through Lyman, Hamilton, and Birdsvew to Concrete.

## **Airport**

Mears Field Airport serves as the local and community air transportation service provider. The airport located on approximately 40 acres. The airport handles small private aircraft and has fueling facilities (100LL). There are adjacent private hanger facilities, but no major passenger or airfreight facilities exist at the airport. Describe how the Airport is managed. The asphalt runway is 2,609 feet in length and 60 feet in width.

There is currently a helipad located at Mears Field but it is in poor condition. Helicopter pilots (including emergency and rescue) currently use the paved area between the Pilots Lounge and the Fueling Facility to land helicopters rather than land on the existing helipad. Relocating and reconstructing the helipad was included in the Capital Facilities Element beginning in 2016. In 2018 the Binding Site Plan for the airport was revised and an alternative location for the Helipad was identified and designated. The helipad relocation is currently slated for 2023.

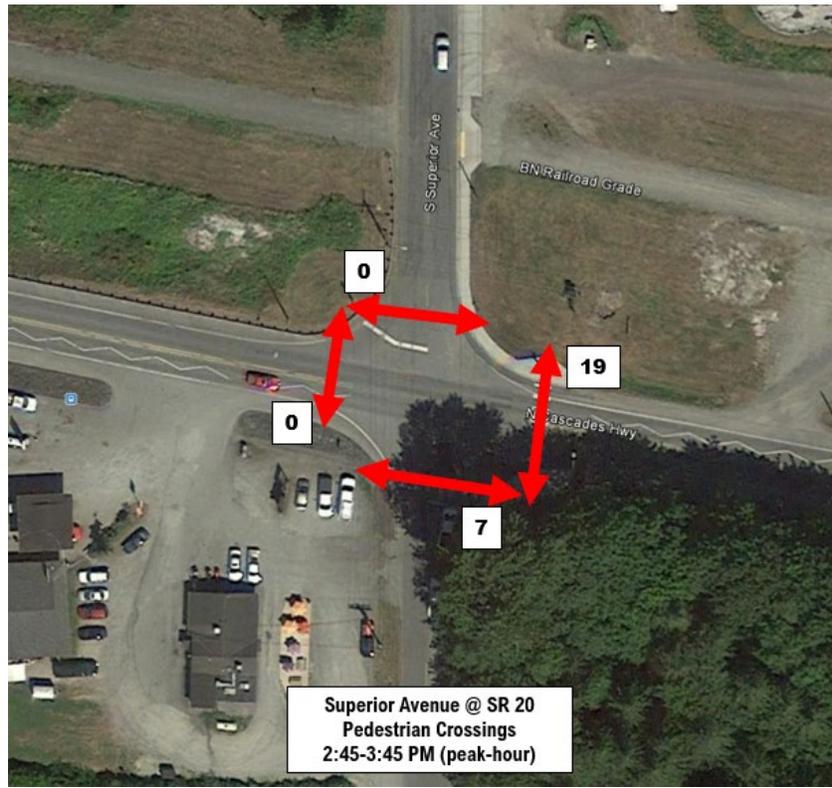
The airport is discussed in more detail in the Land Use Element and projects related to its long term maintenance are included in the Capital Facilities Element Appendix CF-1.

## **Pedestrian / Bicycle Trails**

Sidewalks throughout the community are in generally poor shape or non-existing. The Town has made sidewalk improvements one of its priorities and over the last several years have made several sidewalk improvements. Sidewalk improvements occurred on the east side of North Superior Avenue in 2016. Main Street has had sidewalk improvements from approximately 'E' Avenue east to Dillard Avenue and from North Superior Avenue west to Grassmere Road. In the summer of 2004, the eastern portion of the Main Street Improvement Project was completed which included repaving and widening sidewalks along Main Street from North Dillard, down to Cupples' Alley. In 2018 the western portion of the Main Street improvements were completed. The Town has funding and is in the process of improving the sidewalks adjacent to Cedar Street between South Park and Superior Avenue and on South Rietze from Cedar Street south approximately 300 feet along the west side of South Rietze. Those improvements are anticipated to be completed in 2019. Improving pedestrian access will continue to be a priority for the Town during the planning horizon.

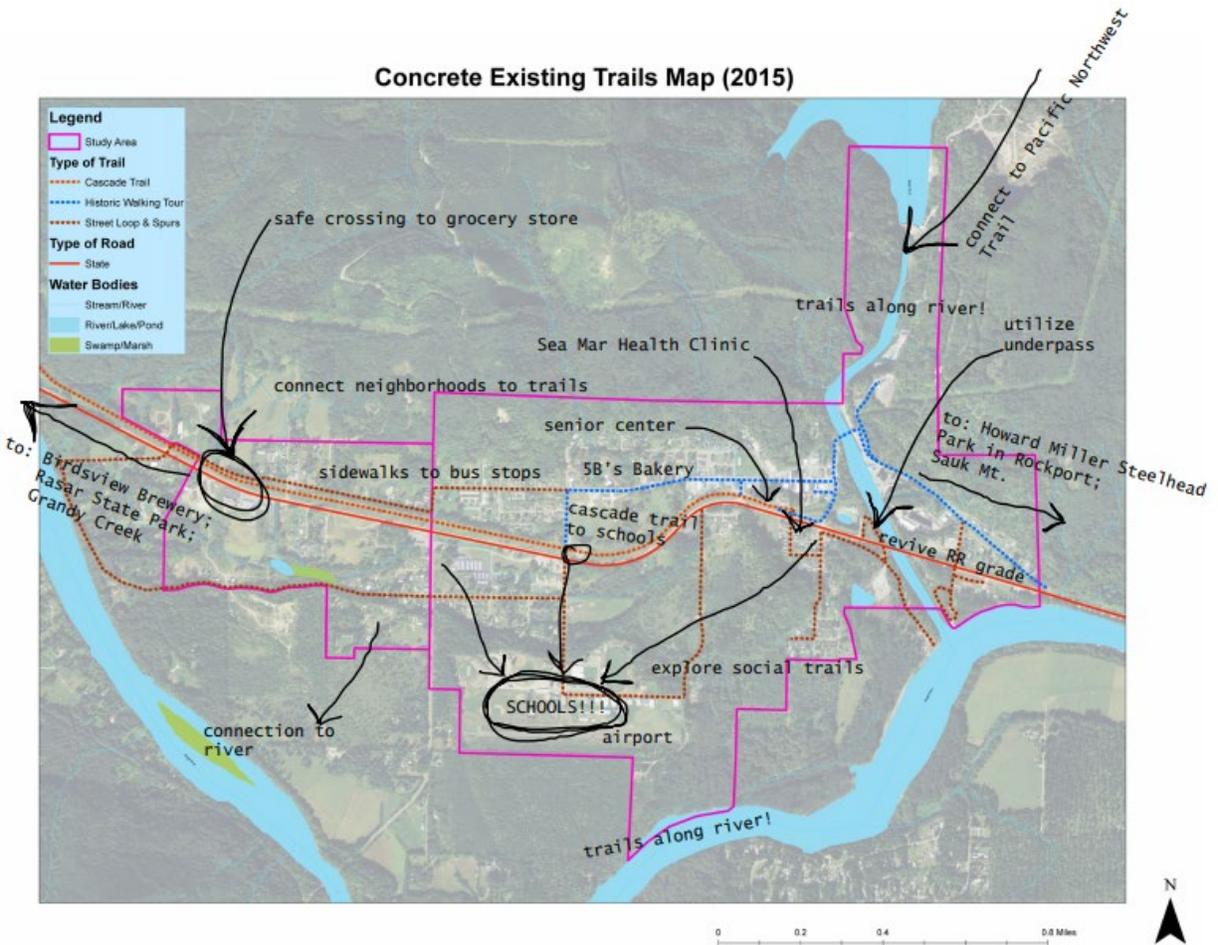
An afternoon count of pedestrians was done at the intersection of Superior Avenue and SR 20. In addition to this intersection being a busy intersection for vehicles, this intersection is also part of a pedestrian corridor that stretches from the schools located on the south end to the transit center and Main Street on the north end. The count determined pedestrian activity peaked during the hour from 2:45-3:45 PM. This time coincides with the afternoon dismissal of the schools. Map 1 shows the volume of pedestrians crossing each leg of the intersection. The count shows pedestrians had a tendency to use the legs of the intersection where pedestrian facilities were available (sidewalks, marked crosswalks, etc.). This shows the importance of maintaining existing pedestrian infrastructure.

## Map 1. Superior Avenue at SR 20 Pedestrian Volumes



In 2016, the Town conducted workshops for the Concrete Trail System Concept Plan to develop a conceptual trail system that built on the existing network of trails. The participants of the workshop identified destinations where they would like to see trails provide connections. Map 2 shows these locations. It is important to note the schools at the south end of Superior Avenue are a key destination according to the participants. This finding is also supported from the pedestrian count at Superior Avenue and SR 20 that showed pedestrian counts peaked during the afternoon school dismissal.

## Map 2. Trail Connections in the Town of Concrete



### Bridge

The Baker River Bridge (Henry Thompson Bridge) is located a half-mile north of the confluence of the Skagit and Baker Rivers at the east end of Limestone Street. The bridge, once “one of the longest single span concrete structures in the West,” is an open spandrel reinforced concrete arch with 185' clear span. The main arch of the bridge consists of two parabolic ribs (5' x 6' in cross section) that spring from the base of massive abutment piers anchored in bedrock. The ribs are connected laterally by radial braces spaced horizontally at fixed distances (description from 1976 HAER inventory). In 2004, the bridge was restored which included replacing the entire bridge deck from the arch up, installing drainage, relocating the water line off of the bridge deck to the north, new sidewalks, and light standards.

### Roadway Classification

#### Major Arterial (Principal).

Major arterials provide for the movement of traffic across and between large subparts of the urban region and serve predominately “through” trips with minimum direct service to abutting land uses. Major arterial service is required by the central business district, shopping centers, industrial plants, major governmental centers, large hospitals, important secondary business districts and

similar land uses which comprise the top layer of hierarchy or trip generators. Major arterials shall form a closed, interconnected system linking together major traffic generators in the urban region, and functioning to collect and distribute traffic from freeways and state highways to less important arterial streets.

**Secondary Arterial (Minor).**

Secondary arterials provide for movement within the large subparts prescribed by major arterials. Secondary arterials may also serve “through” traffic, but provide more direct service to abutting land uses than do major arterials. Secondary arterial service is required by small central business districts, tourist districts with motels, and restaurants, high schools and some grade schools, strip commercial development, parks and recreational areas, warehousing areas and similar land uses which comprise the middle layer of the trip generator hierarchy. Secondary arterials shall, whenever possible, be long, continuous streets with direct rather than meandering alignments.

**Collector Arterial (Collector).**

Collector arterials provide for movement within the smaller areas, which are often definable neighborhoods and may be bounded by higher class arterials. Collector arterials serve very little “through” traffic but serve a high proportion of local traffic requiring direct access to abutting land uses. Collector arterial service is required for the majority of land uses which generate measurably important traffic volumes such as plats, churches, small parks and recreation areas, convenience shopping centers and other areas which are not served by major or secondary arterials. Collector arterials need not be particularly long or continuous since this would tend to attract through trips. Collector arterials have an average daily traffic volume that ranges between 100 to 1,000 vehicles per day.

**Access Street (Access).**

Access streets provide for movement within residential neighborhoods, light commercial areas, and the residential agricultural districts. Access streets serve no through traffic and may terminate in cul-de-sacs.

The Town has decided not to adopt the County’s recently revised road standards for local streets. Instead they are adopting Town classifications of local streets:

- For streets with 500 or more trips per day, a thirty-foot paved cross-section with a curb, gutter and sidewalk on one side only that allows parking on both sides.
- For Streets under 500 trips per day, a twenty-six foot paved cross-section as above.

Both cross-sections will have ten-foot bio-filtration swales opposite the sidewalk.

**Street Designations.**

Designation and classification of new streets shall be appropriate to serve land uses as designated in the Land Use Element of the Comprehensive Plan. Every effort shall be made to incorporate new streets into the existing street grid pattern, and to provide for systematic naming and numbering of streets.

## Level of Service Methodology

The Town of Concrete analyzed its street system using the following nationally accepted methodology.

Average Daily Traffic Volume: Average daily traffic volume counts were collected in 2018.

Peak Hourly Volumes: Peak hourly volumes are generally used in conjunction with intersection analyses. Since average daily traffic volumes did not indicate the need for extensive intersection counting, peak hourly volumes were gathered at only Superior Avenue and SR 20.

Level of Service: The concept of *levels of service* uses qualitative measures that characterize operational conditions within a traffic stream and their perception by motorists and passengers. The descriptions of individual levels of service characterize these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions. The volume of the traffic that can be served under the stop-and-go conditions of LOS F is generally accepted as being lower than possible at LOS E; consequently, service flow rate E is the value that corresponds to the maximum flow rate, or capacity, on the facility. For most design or planning purposes, however, service flow rates D or C are usually used because they ensure a more acceptable quality of service to facility users.

Tiers of daily roadway volumes were defined to correspond with each level of service. Standard daily roadway volumes used by other jurisdictions were adjusted for aspects unique to the Town's roadways including vehicle speed, the number of lanes, and the types of pedestrian facilities adjacent to the road. Table 24 shows the roadway capacity for each level of service along with adjustments for unique factors.

**Table 24. Level of Service Standards**

Level of Service	Daily Volume Threshold (2 Lanes, Total Volume)
A	< 3,900 vehicles
B	3,900 – 4,900 vehicles
C	4,900 – 6,900 vehicles
D	6,900 – 8,600 vehicles
E	8,600 – 10,500 vehicles
F	> 10,500 vehicles
Adjustment	Change in Roadway Capacity
Speed < 30 mph	-25%
No Sidewalks	-35%
Sidewalk, 1 Side Only	-15%
Left-Turn Lanes	+20%

***Level of Service Standards***

The Town determined that level of service standard “C” is reasonable for all streets. By setting these standards at these levels, the Town ensures consistency with other jurisdictions, allows for moderate growth, and does not unduly burden itself fiscally. Table 26 lists the current level of service and its adopted standard for each arterial roadway found within Concrete.

In addition, SR 20 passes through the center of Concrete and it should be noted that the State has established Level of Service (LOS) C for State Route 20 through Concrete.

**Transit Level of Service Standards**

The transit level of service standards must be carefully designed to ensure that they do not conflict with the arterial level of service standards. It is also important to ensure that the transit level of service standards would be achievable since the Town itself does not directly provide transit service. Therefore, the Town has not adopted a level of service standard for transit. However, Skagit Transit (SKAT) will be establishing transit quality of service (QOS) thresholds and will coordinate their recommended transit level of service policies with the Town of Concrete’s requests. The QOS attempts to take into account factors besides delay such as “coverage, scheduling, capacity, information dissemination, passenger loads, reliability, travel time, cost, safety, and security and passenger comfort”<sup>1</sup>.

Skagit Transit Route 717 Sedro-Woolley/Concrete serves the Town with 3-hour headways during the weekday and one AM and PM trip each on Saturdays. The route travels on SR 20 and with stops at the park and ride on Superior Avenue and City Hall. Related to the QOS thresholds used by SKAT, stop amenities (such as shelters or benches) should be evaluated especially given the long headways of Route 717.

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<sup>1</sup> Skagit County Transportation Element Technical Appendix, pg 47

**Table 25. Level of Service Standards**

Level of Service	Standard Intersection Measure
A	Little/No Delay
B	Short Delays
C	Average Delays
D	Long Delays
E	Very Long Delays
F	Extreme Delays/Exceeding Capacity

**Table 26. Current Levels of Service**

Street Segment	Current LOS	Adopted LOS
South Superior	A	C
North Superior	A	C
Main Street	A	C
Limestone St	A	C
Cedar Street	A	C
Douglas Voss III Way	A	C
SR 20	B	C

The Superior Avenue and SR 20 intersection was analyzed for its PM peak-hour intersection level of service. The northbound and southbound approaches currently operate at LOS C and LOS B, respectively. With the projected future growth in the Town, these approaches are expected to both operate at LOS C. However, with the planned south D avenue connector both approaches are likely to improve to LOS B as volumes from the school and airport use the alternative route.

**Application of the Concurrency Test**

Before the Town can project future transportation needs, it must determine where in the development process it will test for concurrency. Because the Town receives relatively few development permit applications and a single development may have a significant impact on the Town as a whole, the Town has decided to review each permit for concurrency at the time of permit application. This does not mean the applicant must be concurrent at the time of permitting; this is simply when the Town will assess transportation capacity. The Town will apply the concurrency test to any permit for more than a single dwelling unit or more than 1,500 square feet of commercial space. The Town will determine existing levels of service on an annual basis as part of the comprehensive plan update. The methodology outlined in the County’s Comprehensive Plan will be used as the Town’s concurrency management system.

***Future Needs and Alternatives***

This section of the Transportation Element contains expected increases in traffic volumes and identifies potential traffic problems. Improvements and expansion of the transportation system will be based on the following analyses:

- (1) Analysis of roadway capacity improvements
- (2) Analysis of roadway safety improvements
- (3) Analysis of projected transportation needs

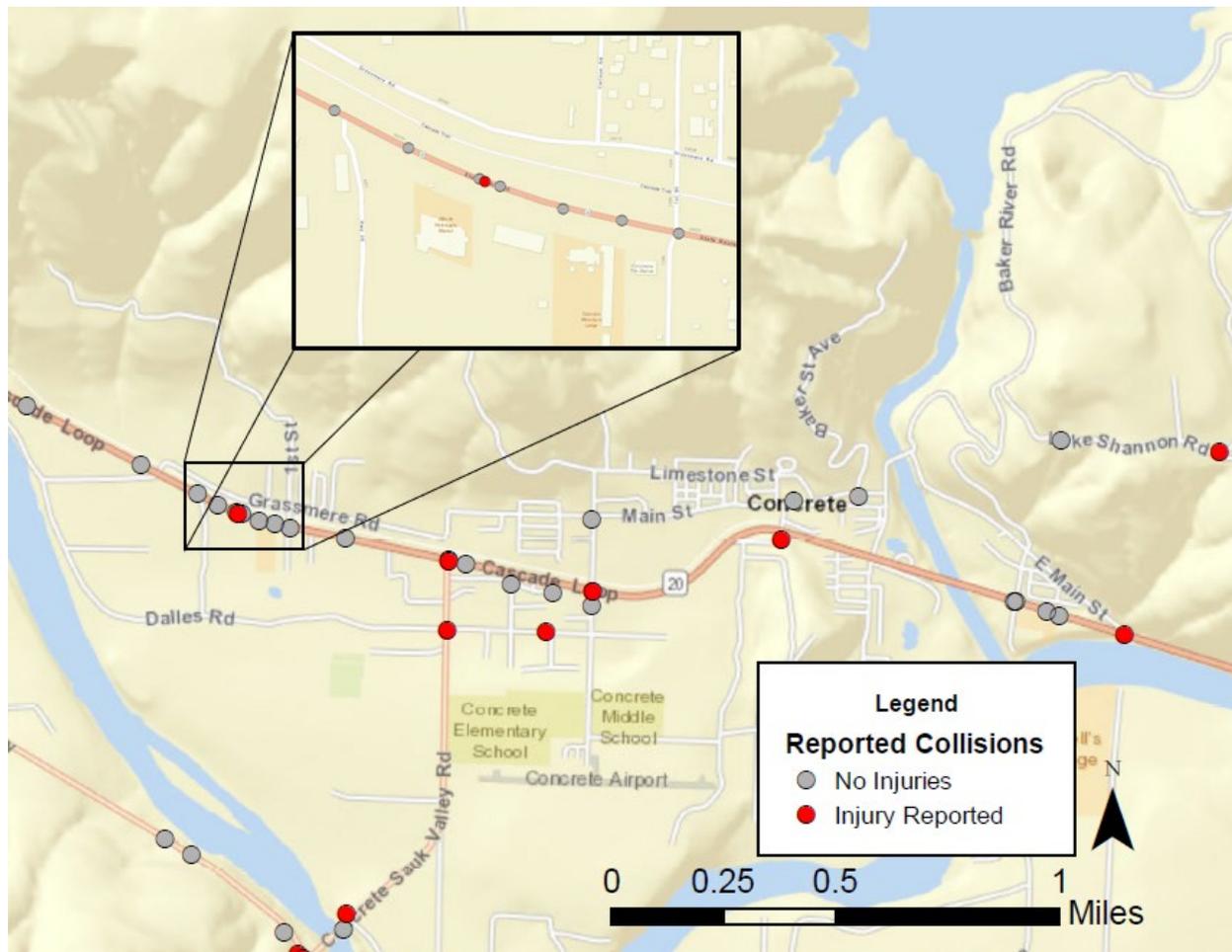
### **Analysis of Needed Capacity Improvement**

After completing the inventory of existing capacity, the Town of Concrete has decided that level of service “C” at peak hour is a reasonable and achievable standard for all streets. All streets currently meet these level of service standards.

### **Analysis of Needed Safety Improvements**

Accident records for the past five years were examined, though few accidents have been reported. The area with the highest clustering of collisions was on SR 20 at the west end of the Town. Collision data from 2013 through 2017 shows 8 collisions occurring between approximately Highway 20 and 1 Street. The contributing factors of these collisions do not appear to support a common, correctable design aspect of the roadway or driver behavior. Further monitoring of this location is recommended to see if the clustering of collisions continues.

**Map 3. Reported Vehicle Collisions in the Town of Concrete (2013-2017)**



## Analysis of Projected Transportation Needs

### Future Roadway Needs

Future traffic conditions were predicted with the aid of regional transportation studies, the established level of service standards, and the designated land uses that are in the Land Use Element. Future land use trends were expressed in terms of number of dwelling units, auto ownership, total employment, and traffic volume. These projections were used to determine the needed improvements and new roadway facilities for the next 20 years.

In determining projected roadway needs, the Town had to plan for the projected transportation volumes in a cost effective manner that would not leave the Town with under-utilized capacity. These roads are costly to build and maintain. Narrower roads could provide routine and emergency access in most residential neighborhoods and will use less paving materials, lower maintenance costs, reduce surface water run-off, and maintain more vegetation.

From 2017 through 2040, the population of the Town, including the UGA, is anticipated to increase from 730 to 1,050—approximately 45% growth. This growth factor was multiplied by each of the existing traffic volumes to project 2040 traffic volumes. The total increase in traffic volumes at locations directly adjacent to SR 20 is roughly proportional to number of new households when dividing by trip generation rates published by the Institute of Transportation Engineers (ITE). Using the projected traffic volumes, the transportation system capacity was determined according to the projected peak hour and 24-hour traffic volumes. Table 27 lists the projected levels of service for arterials within the Town of Concrete. The results indicate there are no level of service deficiencies that would need to be corrected by the Town. Map 4 at the end of this document also shows the daily volumes of the roadways analyzed.

**Table 27. Projected Levels of Service and Average Daily Trips (ADT)**

Street Segment	Current LOS	Projected LOS	Adopted LOS
South Superior	A (1,135)	A (1,645)	C (4,700)
North Superior	A (1,210)	A (1,760)	C (4,700)
Main Street	A (1,160)	A (1,680)	C (5,500)
Limestone St	A (90)	A (130)	C (3,600)
Cedar Street	A (250)	A (360)	C (3,600)
Douglas Voss III Way	A (1,155)	A (1,675)	C (5,500)
SR 20	B (5,200)	C (6,540)	C (8,300)

### **Future Transit Needs**

The Town relies on a limited regional bus system for transit service. The Town will work cooperatively with SKAT to improve the existing transit system.

### **Future Pedestrian and Bicycle Needs**

As identified in the inventory, sidewalks are discontinuous throughout the Town. Providing a system of sidewalks throughout the Town is currently a priority with extensive work being programmed in the Town's current six-year transportation improvement program.

### **School District Transportation Needs**

The Concrete School District has approached the Town regarding their anticipated future transportation needs. Safe and convenient pedestrian and bicycle routes to school, particularly across Highway 20, is a priority for the School District.

In the event of an emergency, there is currently only one access road to the School campus (South Superior). The School District has expressed a need to acquire a second access to the school grounds so that if South Superior is inaccessible, the School can transport kids safely off of the school grounds. A depiction of the proposed secondary access is included in the attachments as well as a letter of approval from WSDOT and FHWA.

The School District is in the process of completing a Strategic Plan which will address existing needs and projected future needs of the District.

### ***Financing Plan***

The Town is confident that the level of service standards adopted in this element are consistent with the level of service standards or plans of other jurisdictions.

The Town, after careful analysis, is not required to make any capital improvements to its street system. It is however, giving the highest priority to sidewalks and drainage improvements as seen in its current six year transportation improvement program., The Town is confident it has the financial resources necessary to complete these desired projects. The identification of funding sources for these transportation related improvements is in the Capital Facilities Element.

The Six-Year Financing Plan for transportation is the result of an iterative process that balances the goals of all comprehensive plan elements. In addition, the objectives and policies in the Transportation Element have been modified to reflect their financial feasibility. Financial planning for transportation used the same process as financial planning for capital facilities, however the timing and funding for transportation are restricted by the concurrency requirement and the binding nature of level of service standards.

The Town is required to create a six-year financing plan for both transportation and capital facilities. However, for transportation, the Town is also required to provide such services concurrently with new development. In addition, existing and new transportation facilities must meet the adopted level of service standards. Therefore, as new development occurs, expenditures on maintenance of existing facilities must be adequate to continue provision of the adopted levels

of service. Although not required in capital facilities planning, the operating costs of transportation facilities become important factors in ensuring that a moratorium on new development is not imposed. The funding mechanisms and funding sources that will be used for transportation improvements are described in the Capital Facilities Element. The Capital Facilities Element also indicates the financial mechanisms that will be used to address funding shortfalls. Primarily the Town relies on grant funding to complete its capital projects. The timing of grant funds can be unpredictable. Project timelines may be pushed forward or back depending on grant availability. In the event that grant funding is not available or insufficient to complete a project, it will be reevaluated.

Map 4. Trail Connections in the Town of Concrete

