CHAPTER 7 Transportation

As part of the City of Monroe's SEPA Programmatic SEIS evaluation of probable impacts relating to the 2024 Comprehensive Plan Update and associated Transportation Plan, this chapter describes transportation within the study area and assesses potential impacts associated with the Proposed Action and No Action Alternative.

7.1 Affected Environment

Transportation in the City of Monroe is described below for the following topics: principal arterials, minor arterials, collectors, and local roads; traffic volumes; traffic operations; traffic safety; freight and passenger rail traffic; pedestrian and bicycle facilities; and transportation demand management.

7.1.1 Methodology

The following description of the affected environment is based on:

- City of Monroe 2015 Comprehensive Plan, Transportation Element.
- City of Monroe 2023–2028 Transportation Improvement Program (TIP).
- Transportation system GIS data provided by the City of Monroe, including roadway functional classifications, walk and bicycle facilities, and freight routes.
- Weekday PM peak period (4 to 6 p.m.) traffic volumes collected by the firm IDAX Data Solutions at key intersections throughout Monroe in June 2022.
- Washington State Department of Transportation (WSDOT) Collision Reports for the period January 1, 2018, to December 31, 2022.

7.1.2 Regulatory Setting

The following regulations, plans, and policies apply to transportation.

STATE REGULATIONS

- RCW 36.70A.070(6) Comprehensive Plans Mandatory Elements sets requirements for the City to develop its Transportation Element to address the motorized and non-motorized transportation needs of the City of Monroe. It represents the City's policy direction for the next 20 years.
- Chapter 36.70A RCW Growth Management Act (GMA) now requires jurisdictions to develop a multimodal transportation system based on regional priorities and coordinated with county and City comprehensive plans. GMA also directs jurisdictions to incorporate the following items into their local comprehensive plans:
 - Level of service (LOS) standards that are consistent with state and regional transportation plans that reflect community goals for multimodal transportation facilities.
 - A minimum of 10-year forecast that reflects capacity needs based on land use assumptions.
 - Needs projection consistent with state and local system needs to meet current and future demands.
 - Active transportation component that identifies pedestrian and bicycle facilities and promotes healthy lifestyles.
 - Improve the safety and efficiency of freight movement and reduce the impacts on other travel modes to support economic development.
 - Environmental protections including pollution mitigation strategies and wildlife habitat restoration and protection.
 - Transportation Demand Management (TDM) strategies including ridesharing, vanpooling, bicycling, walking and use of public transportation, efficient parking, and land use policies.
 - Future funding analysis for new facilities and maintenance based on projected revenues.
 - Multi-year financing plan based on the needs identified in the comprehensive plan.
 - Shortfall strategy to fund adopted levels of service.
 - Intergovernmental coordination based on countywide planning policies.

REGIONAL REGULATIONS

- Puget Sound Regional Council's VISION 2050 (PSRC 2020) is the region's plan for growth. It provides a structure for consideration of transportation issues for freight, roads, transit, bicycles, and walking across Puget Sound to support the regional growth strategy. A key concept of VISION 2050 is the need to link the decision-making processes of regional and local growth centers. VISION 2050 also recognizes the environmental and climate challenges created by transportation infrastructure and supports energy-efficient, sustainable, and safe transportation options. Finally, VISION 2050 emphasizes pursuing a range of funding options to address transportation needs.
- Regional Transportation Plan (RTP) 2022–2050 (PSRC 2022) is the long-range transportation plan for the central Puget Sound region and is developed by PSRC. The RTP is adopted every 4 years and is the transportation plan to implement VISION 2050. Transportation projects included in the RTP that support travel to and from Monroe are:
 - Centennial Trail South (Project 2842) Shared use path between the City of Snohomish southern boundary and King County.
 - Snoqualmie Valley Trail (Project 2822) Shared use trail between City of Snohomish eastern city limits and King County line.
 - SR 522 at Paradise Lake Road Intersection Improvements (Project 4257) – Construction of intersection improvements with pedestrian and bicycle facilities.
 - SR 522 Paradise Lake Road to Snohomish River Widening (Project 1698) – Widen to a four-lane divided highway with pedestrian and bicycle improvements. Complete construction of SR 522/Fales Road-Echo Lake Road interchange.
 - US 2 Bickford to Monroe (Project 4176) Widen to four lanes.
 - US 2 Monroe Bypass Phase 1 (Project 5444) Construct a two-lane SR 522 extension to the north and terminate the road at Chain Lake Road to connect to the local street system.
 - US 2 Monroe to City of Sultan (Project 4177) Widen the corridor to four lanes (PSRC 2022).
- Snohomish Countywide Planning Policies (CPPs) are required by GMA to be prepared by Snohomish County in collaboration with cities and tribes as a framework for developing consistent comprehensive plans. Snohomish County Tomorrow (SCT), a cooperative public, inter-jurisdictional forum comprising the county's cities and tribal governments, oversees

developing, reviewing, and implementing these CPPs. The county's CPPs help ensure consistent transportation planning and implementation across jurisdictions. The jurisdictions' transportation elements are developed to reflect the CPPs' guidance and requirements.

• Snohomish County planning policies emphasize a coordinated and efficient transportation system that minimizes impacts on the climate and employs adaptive management strategies to meet the varied growth patterns throughout the county. The countywide planning goals also echo the state and regional perspective of establishing multimodal transportation connectivity between residential areas and growth centers. Snohomish County suggests that the countywide planning policies "are intended to guide transportation planning by the County and cities in Snohomish County and to provide the basis for regional coordination with the Washington State Department of Transportation (WSDOT), the Puget Sound Regional Council (PSRC), and transportation operating agencies" (Snohomish County 2011).

LOCAL REGULATIONS

• City of Monroe LOS Standards are based on the requirements of Washington's GMA and consistent with regional and state planning. Monroe sets LOS standards for arterial, collector, and local streets (not state highways). The current adopted City LOS standard is D for arterial intersections and LOS C for collector and local street intersections. WSDOT sets the LOS standards for the highways of statewide significance (HSS), which in Monroe are US 2 and SR 522. For non-HSS facilities, like SR 203, the state requires that an agency coordinate with WSDOT in establishing an LOS standard for those facilities. PSRC has determined that SR 203 is a highway of regional significance and designates the LOS standard. The current LOS standard for all state routes within the City is LOS D.

7.1.3 Arterials and Collectors

Figure 7-1 shows the existing roadway functional classification system for transportation facilities in the study area. Three major, state-controlled highways (principal arterials) serve Monroe: US 2, SR 522, and SR 203. US 2 provides the major east-west regional connection between Monroe and Everett to the west and to Sultan, Stevens Pass, and beyond to the east. SR 203 provides a north-south connection to Duvall and SR 522 provides northeast-southwest connection to Woodinville, Bothell, and north Seattle. Within Monroe, US 2, SR 522, and SR 203 are classified as principal arterials. Main Street/Old Owen Road, Fryelands Boulevard, a portion of Chain Lake Road, N Kelsey Street, and Woods Creek Road are classified as minor arterials. Several collector streets provide

connectivity between the City's principal and minor arterials and its local roads. The collectors also provide vital connectivity between the City's residential areas and central business district and are therefore candidates for improvements to active mode facilities. **Figure 7-1** shows Existing functional road classifications. Other roads in Monroe are local roads.

7.1.4 Traffic Volumes

Traffic levels in the City have increased in most areas since completion of the 2015 Transportation Plan commensurate with growth in housing and jobs. A comparison of 2022 traffic volumes with 2015 Transportation Plan traffic levels shows that weekday PM peak hour traffic growth was largest at intersections north of US 2, with the largest increase in weekday PM peak hour traffic volumes occurring at the intersection of Chain Lake Road and Kelsey Street (where traffic increased by approximately 5 percent per year for a total of over 50 percent in 8 years). This growth is the result of residential development north of the City. Little to no growth was shown at intersections along 179th Avenue. Overall traffic volume on US 2, SR 203, and SR 522 has changed less than 2 percent per year since the 2015 Transportation Plan.

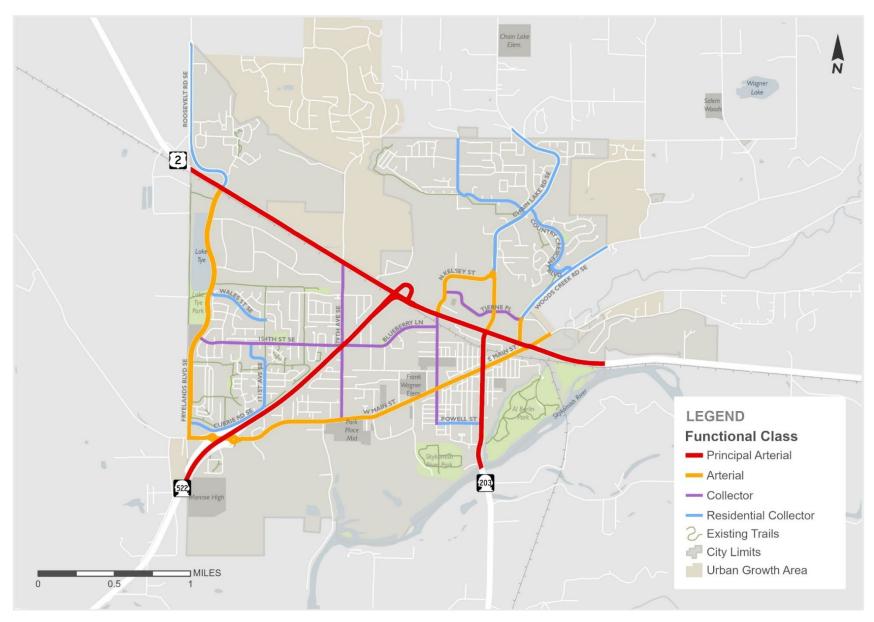


FIGURE 7-1 Functional Classification of the Road System

7.1.5 Traffic Operations

Traffic volume data collected in June 2022 were used to analyze traffic operations at 24 study intersections in Monroe. Analysis of traffic operations provides a quantitative method for evaluating existing transportation conditions. Intersection operations were evaluated based on their ability to accommodate PM peak hour demand. Level of Service is how the operations of road systems are measured to ensure that adequate facilities are present or planned and funded to accommodate growth. LOS is a qualitative term describing the operating conditions a driver may experience while traveling on a particular street or highway during a specific time interval. Criteria range from LOS A, indicating free-flowing conditions with minimal vehicle delays, to LOS F, indicating heavy congestion and long vehicle delays. At signalized, roundabout, and all-way stop-controlled intersections, LOS is measured in terms of weighted average delay per vehicle and reported for the intersection as a whole. At unsignalized side-street stop-controlled intersections, LOS is measured in terms of the average vehicle delay and is typically reported for the worst movement.

The study intersections were evaluated based on their ability to accommodate PM peak hour demand in their existing configuration, including number of lanes and traffic control. As described previously, Monroe has an LOS D standard for arterial intersections and an LOS C standard for collectors and local street intersections. An LOS D standard has been adopted for state routes running through Monroe (US 2, SR 203, and SR 522).

Table 7-1 provides a summary comparison between 2014 and 2022 intersection LOS at the study intersections. The 2014 conditions are presented to provide an understanding of how traffic operations have changed since completion of the 2015 Transportation Plan.

TABLE 7-1 Comparison of Weekday PM Peak Hour Intersection LOS

		2014 ^a			2022		
Intersection	LOS Standard	LOSb	Delay ^c	WM ^d or v/c ^e	LOS	Delay	WM or v/c
Fryelands Blvd/US 2	D	D	35	_	D	38	_
Fryelands Blvd/Tye St	С	С	20	EBL	D	28	EBL
Fryelands Blvd/Wales St	С	Α	9	_	Α	8	_
Fryelands Blvd/154th St	С	В	13	_	В	12	_
Fryelands Blvd/Main St	С	С	19	_	С	18	_
SR 522 SB Ramps/Main St	D	D	28	SB	Α	5	0.304
SR 522 NB Ramps/Main St/Tester Rd	D	В	14	0.786	Α	8	0.665
179th Ave/Main St	С	В	13	_	С	28	_
179th Ave/154th St	С	С	16	_	В	15	_
179th Ave/147th St	С	D	31	EB	D	33	EB
179th Ave/US 2	D	D	44	_	D	44	_
SR 522 Ramps/US 2	D	В	17	_	В	16	_
Kelsey St/US 2	D	С	22	_	D	44	_
Kelsey St/Blueberry Ln	С	D	26	EBL	С	18	EBL
Kelsey St/Main St	С	Α	9	_	Α	9	_
Lewis St/Main St	С	С	27	_	В	18	_
Lewis St/US 2	D	D	53	_	D	47	_
Chain Lake Rd/Tjerne Pl	С	С	28	_	В	15	_
Chain Lake Rd/Kelsey St	С	В	13	NB	Α	8	0.554
Chain Lake Rd/Rainier View Rd	С	В	21	EBL	В	14	EB
Chain Lake Rd/Country Crescent Blvd	С	В	15	WBL	С	15	WBL
Main St/US 2	D	С	27	_	D	41	_
Woods Creek Rd/Tjerne Pl	С	_	_	_	Α	8	_
Woods Creek Rd/Country Crescent Blvd	С	В	13	_	В	11	EB

SOURCE: Prepared by Transpo Group 2024

a. From the City of Monroe 2015 Transportation Plan.

b. Level of service (LOS), based on Highway Capacity Manual 7th Edition methodology unless otherwise noted.

c. Average delay in seconds per vehicle.

d. Worst movement (WM) reported for unsignalized intersections, where WB= westbound, WBL = westbound left, SB= southbound, NB= northbound, EB= eastbound, and EBL = eastbound left.

e. Volume to capacity (V/C) ratio for roundabout-controlled intersections.

As shown in **Table 7-1**, all study intersections currently meet the LOS standard, except for the Fryelands Boulevard/Tye Street intersection. A signalization project planned for 2025 may improve LOS at the Fryelands Boulevard/Tye Street intersection. Growth has resulted in traffic volume increases at the Fryelands Boulevard/Tye Street intersection and the LOS has degraded to D. For most study intersections, traffic operations have remained consistent from 2014 to 2022. There are seven intersections that showed improved LOS when comparing 2014 and 2022 conditions for the reasons described below:

- SR 522 SB Ramps/Main Street Construction of a roundabout.
- SR 522 NB Ramps/Main Street/Tester Road Slight reduction in vehicle volumes.
- 179th Avenue/154th Street Slight reduction in vehicle volumes.
- Kelsey Street/Blueberry Lane Updates to the channelization.
- Lewis Street/Main Street Slight reduction in vehicle volumes.
- Chain Lake Road/Tjerne Place Updates to signal timing.
- Chain Lake Road/Kelsey Street Construction of a roundabout.

Table 7-1 shows that at four intersections, operations degraded between 2015 and 2022 but the LOS standards are still met. Increases in delay at intersections are primarily a result of growth. Intersections where operations degraded are:

- 179th Avenue/Main Street LOS B to LOS C.
- Kelsey Street/US 2 LOS C to LOS D.
- Chain Lake Road/Country Crescent Boulevard LOS B to LOS C
- Main Street/US 2 LOS C to LOS D.

7.1.6 Traffic Safety

Citywide collision records were reviewed to identify potential safety issues for vehicles, pedestrians, and cyclists. The traffic safety analysis included collision data for a 5-year period from January 1, 2018, through December 31, 2022. Of collisions in Monroe during that time period, two were reported fatalities, one fatality along US 2 and the other fatality along SR 522. The number of collisions occurring along City roads are generally low to moderate, compared to a higher number of collisions occurring along state routes in the City, which have higher vehicle volumes. **Figure 7-2** shows the locations of collisions in the City and highlights pedestrian and bicycle crashes, fatalities, and serious injuries. Most pedestrian crashes are in the downtown area where there is more pedestrian activity.

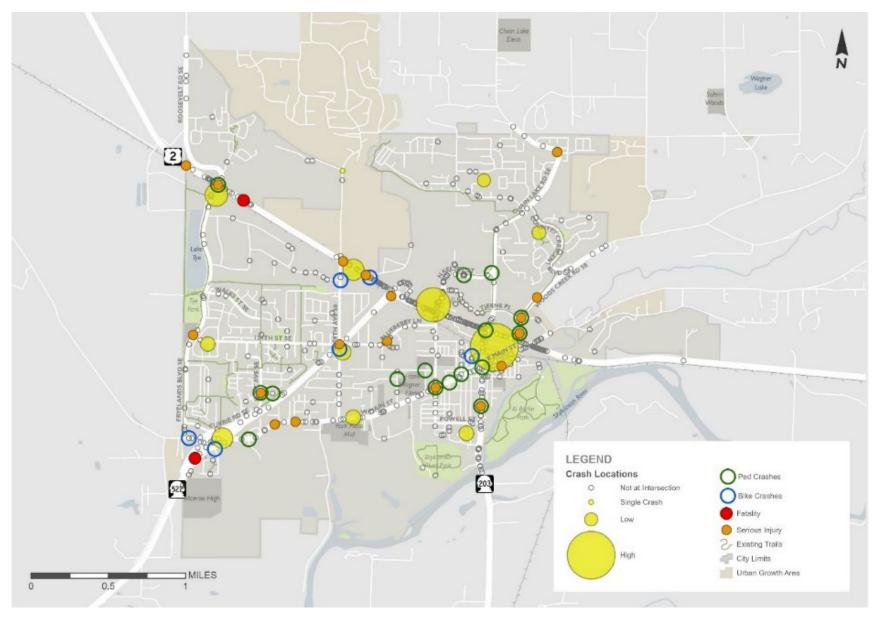


FIGURE 7-2 5-Year (2018-2022) Collision Summary

7.1.7 Transit Service

Community Transit provides transit service throughout the City of Monroe. Community Transit offers bus, paratransit, vanpool, and commuter services. Bus routes 270, 271, and 424 travel through the City. Bus routes 270, a local route, and 271, a Boeing route, provide service between Gold Bar and Everett via US 2, with average headways or the amount of time between buses arriving at a stop, of approximately 60 minutes. Bus route 424 is a commuter route with limited service of two trips from Monroe to Seattle in the morning, and two trips from Seattle to Monroe in the afternoon. Route 424 travels between the cities of Snohomish and Seattle and passes through Monroe via US 2, 179th Avenue SE, and SR 522, with average headways ranging from 75 to 90 minutes.

Transit routes, hours of operation, and recent ridership data available from Community Transit are summarized in **Table 7-2**.

TABLE 7-2 Community Transit Routes Serving Monroe

Route Number	Description	Hours of Operations	Average Daily Ridership ^a
270	Gold Bar to Everett	Weekdays Only (5:45 a.m5:30 p.m.)	690
271	Gold Bar to Everett	Weekdays (6:015 a.m.– 10:01 p.m.)	920
		Saturdays (7:05 a.m 9:29 p.m.)	
		Sundays (7:05 a.m 9:28 p.m.)	
424	Snohomish to Seattle	Weekdays Only (3:37 p.m6:47 p.m.)	955

SOURCE: Community Transit, Schedule accessed April 2024 https://www.communitytransit.org/maps-and-schedules.

Transit operations are out of the City's direct control; however, Monroe has influence over the transportation network that Community Transit serves. The 2015 Transportation Plan defined transit LOS based on the amenities and access provided along corridors with transit. The City defines LOS for transit using a green, yellow, and red rating, where yellow is the target minimum LOS standard. Green transit LOS standard can be reached by providing a high level of the transit supportive amenities at major stops, installing sidewalks and marked crosswalks at all stops, and

a. Represents average daily ridership for May 2023 provided by Community Transit.

attracting frequent, all day transit service. The yellow standard includes some transit stop amenities, sidewalks, and marked crosswalks at some stops, and all-day service with headways of 30 minutes or less during the peak hour and 60 minutes or less during midday. Monroe has made progress towards this LOS standard with the sidewalks and connectivity of the transportation network along corridors served by transit; however, the City has not achieved the desired headways.

Community Transit updated its Journey 2050 Long Range Plan in December 2023. The plan provides a vision for future transit improvements in the Community Transit service area. Improvements include increased frequency of fixed-route service within Monroe and providing mobility options like on-demand service (Community Transit 2023).

7.1.8 Freight and Passenger Train Traffic

The Burlington Northern Santa Fe (BNSF) rail line bisects the City of Monroe, generally running parallel to US 2, with five at-grade crossings located at Fryelands Boulevard, 170th Avenue SE, Kelsey Street, Lewis Street, and E Main Street. Both freight and passenger trains operate on the tracks. Crossing closures frequently result in extended periods of delay at intersections and gridlock before the roadway network can return to normal operations after the crossing gates have raised. The crossing locations are also located along primary emergency response routes for the City. Rail traffic impacts on mobility within the City present an ongoing issue as north-south movement cannot proceed while trains pass. With populations expected to increase, so is the passenger rail service. Rail service through the City of Monroe is part of the Strategic Rail Corridor Network (STRACNET) designation, established by the Department of Defense and the Federal Railroad Administration (FRA) to ensure rail transportation readiness capabilities during a time of need (FRA 2023).

7.1.9 Pedestrian and Bicycle Facilities

Figure 7-3 illustrates the existing pedestrian and bicycle facilities within the City. Most roadways in Monroe offer access to sidewalks or shared-use pathways. Many of the City's signalized or roundabout-controlled intersections provide crosswalks. Annual sidewalk improvements and removal of barriers to accessibility are a specific goal for the City. The City completed an Americans with Disabilities Act (ADA) self-evaluation and transition plan for pedestrian facilities in the public rights-of-way in 2021.

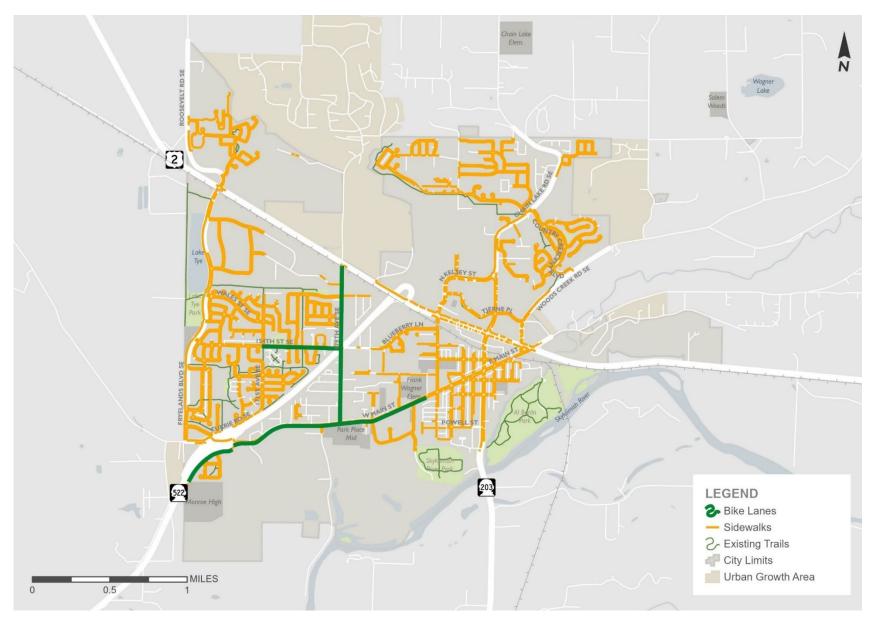


FIGURE 7-3 Existing Pedestrian and Bicycle Facilities

Compared to pedestrian facilities, bicycle-only facilities are less present in the City; however, many sidewalks and shared use paths are wide enough to accommodate bicycle traffic. Dedicated bike lanes are present on Main Street, 154th Street, and 179th Avenue.

7.1.10 Transportation Demand Management

Transportation demand management is focused on reducing reliance on single-occupant vehicles. The 2015 Transportation Plan has a policy for requiring new development to include site and building features that support alternative modes of transportation. The City also has a Commute Trip Reduction (CTR) program, which is outlined in Chapter 22.88 Monroe Municipal Code (MMC). The goal of the program is to reduce drive alone vehicle trips and vehicle miles traveled for work. The City's CTR program outlines a range of strategies for employers to implement such as:

- Identifying an employee transportation coordinator.
- Distributing commuter information to employees.
- Preferred vanpool and carpool parking.
- Subsidies for transit, vanpools, and other non-drive alone modes.
- Flexible work schedules and telecommuting.
- Bicycle parking/lockers, showers, and other amenities on-site.
- Charging employees for parking.

Currently, the City of Monroe is eligible for Vanpool services provided by Community Transit. Vanpools must consist of at least three riders and can accommodate up to 12 riders per vanpool group, including the driver. Users pay a fare based on the daily round trip miles and the size of the van used. Community Transit supplies the van, fuel, insurance costs, and any highway tolls.

A park-and-ride facility with a capacity of 102 parking stalls is available on US 2, west of the Evergreen State Fair Park. The facility is owned by WSDOT and operated by Community Transit and offers direct access to bus routes 270, 271, and 424.

7.1.11 Air Transportation

Aviation in Monroe is accommodated by First Air Field, a privately owned airport adjacent to the Evergreen State Fairgrounds that is available for public use. First Air Field is not listed in the National Plan of Integrated Airport Systems (NPIAS) (FAA 2023) and according to WSDOT it is classified as a community airport (WSDOT, n.d.).

7.2 Potential Impacts

This section evaluates the impacts of the alternatives on transportation. The No Action Alternative and the Proposed Action are assessed within the context of the Affected Environment.

7.2.1 Impact Assessment Methodology and Thresholds of Significance

Impacts of the alternatives were assessed based on future traffic forecasts. The Monroe Travel Demand Model was developed in 2022 and is used as a basis for the 2024 Comprehensive Plan Update and the 2024 Transportation Plan to determine future traffic forecasts. The model accounts for the number of households and employees within the City and converts those into weekday PM peak hour trips. These trips were then converted to travel modes and allocated to City roadways to understand overall impacts on the transportation system for the No Action Alternative and the Proposed Action. The base year of the Monroe Travel Demand Model represents 2022 conditions, and the future horizon year represents 2050 conditions. Land use information (existing and future) was provided by the City as part of its land use planning efforts, which also included coordination with the PSRC land use datasets.

Both alternatives would implement demand management strategies, similar to existing conditions, including the CTR program.

As described in the Affected Environment, the City of Monroe currently evaluates transportation impacts based on vehicle-based intersection operations LOS standards. The 2024 Transportation Plan will revise the City LOS standards for evaluating transportation impacts. Under Washington law, LOS standards can be applied in two areas: State Environmental Policy Act (SEPA) review and concurrency management. It is possible to have different LOS standards and methodologies for SEPA review completed for developments and concurrency management.

The City of Monroe's LOS standards under SEPA will be vehicle-based intersection operations for local streets and state routes. The City may adopt intersection LOS standards for SEPA that are different from current standards; however, for state routes the current WSDOT LOS D standard will continue to be applied.

For transportation concurrency, the City is in the process of developing a multimodal level of service standard that will incorporate a corridor travel time metric that will establish minimum travel speeds along select corridors and a "system completeness" metric for the planned pedestrian and bicycle networks to estimate multimodal system connectivity.

The No Action Alternative and Proposed Action are evaluated against the revised concurrency standard and the WSDOT LOS D standard for state routes to assess impacts.

The following will apply to WSDOT intersections when future development is proposed:

- Where the LOS prior to development is D or better, attempts to maintain LOS D shall be undertaken.
- Where the LOS prior to development is E, the state will request that LOS E be maintained after development.
- Where the LOS prior to development is F, the state will request mitigation measures so that one of the following is true:
 - a) The estimated delay for signalized intersections is no worse than pre-development conditions;
 - b) The reserve capacity for non-signalized intersections is no worse than pre-development conditions; or
 - c) The volume-to-capacity ratio for segments is no worse than pre-development conditions.

The SEPA LOS standard applied to local streets will be evaluated using site specific traffic studies to understand impacts of future development proposals and is not included in this programmatic SEPA assessment of impacts of the 2024 Comprehensive Plan Update alternatives.

Monroe's transit LOS is defined based on the amenities and access provided along corridors with transit. The City defines LOS for transit using green, yellow, and red gradings. Green transit LOS standard can be reached by providing a high level of the transit supportive amenities at major stops, installing sidewalks and marked crosswalks at all stops, and attracting frequent, all day transit service. The yellow standard, which is the minimum target, includes some transitstop amenities, sidewalks, and marked crosswalks at some stops, and all-day service with headways of 30 minutes or less during the peak hour and 60 minutes or less during midday. No threshold for air traffic is provided because First Air Field is a private facility. Neither alternative is expected to result in changes in air travel or traffic.

For the purposes of this SEIS, thresholds of significance for transportation impacts include:

• **Intersection Delay:** The alternative would result in an increase in delay at state route intersections.

- **Intersection LOS:** The alternative would not meet WSDOT LOS D standard for state route traffic operations.
- **Traffic Safety:** The alternative would result in increased potential for traffic safety issues.
- Transit LOS: The alternative would not meet the "yellow" LOS standard for transit.
- **Rail Traffic:** The alternative would result in increased rail traffic such that new, unplanned infrastructure would be required.

7.2.2 Impacts Common to Both Alternatives

This section describes impacts that would occur under each alternative. Traffic volumes would increase. The City is in the process of developing a multimodal level of service standard that will incorporate a corridor travel time metric used to assess potential impacts and determine transportation needs for the City. With increases in traffic volumes, travel times will also increase without implementation of transportation improvements. Also under each alternative, the potential for conflicts between modes, vehicle-vehicle, vehicle-pedestrian, and vehicle-bicycle, increases. Specific traffic volume and operations impacts are discussed for each alternative in Section 7.2.3 and Section 7.2.4.

Freight and passenger rail traffic regionwide is expected to increase in the future, which could result in an increase in rail traffic at atgrade rail crossings. The growth in Monroe housing and jobs under each alternative would not result in freight traffic increases.

Each alternative would have impacts on the pedestrian and bicycle facilities unless sidewalk, trail, and other pedestrian and bicycle facility improvements are implemented. Specific impacts are discussed in Section 7.2.3 and Section 7.2.4.

7.2.3 Impacts of the No Action Alternative

This section describes the impacts of the No Action Alternative.

TRAFFIC VOLUMES

As described previously, future No Action Alternative 2050 traffic forecasts were developed using the City's Travel Demand Model. **Table 7-3** shows the No Action Alternative weekday PM peak hour trip generation and vehicle miles traveled (VMT) compared to existing conditions. VMT is a measure of all the miles traveled by cars and trucks in the City of Monroe during the weekday PM peak

hour. As shown in the table, the anticipated growth in jobs and housing within Monroe and the surrounding area with the No Action Alternative results in a 34 percent increase in weekday PM peak hour trips and 25 percent increase in VMT as compared to existing conditions.

TABLE 7-3 Comparison of Existing and No Action
Alternative Trips and Vehicle Miles Traveled

	Existing	No Action Alternative	Percent Increase ^a
Weekday PM Peak Hour Trips	12,353	16,547	34%
Vehicle Miles Traveled (VMT)	40,625	50,972	25%

SOURCE: City of Monroe Travel Demand Model; Transpo Group 2024 NOTES:

The increase in weekday PM peak hour trips and VMT for the No Action Alternative results in traffic volume increases at the study intersection. The PM peak hour volumes at the study intersections are expected to increase on average by approximately 30 percent under the No Action Alternative compared to existing conditions. There are areas of the City where more growth in jobs and/or housing is anticipated resulting in higher-than-average increases in weekday PM peak hour traffic volumes including 40 to 60 percent for Chain Lake Road intersections and 40 to 50 percent for Wood Creek Road intersections. Fryelands Boulevard is anticipated to have lower than average increases in traffic volumes of 15 to 20 percent. The evaluation of and significance conclusions for traffic operations (below) consider traffic volume increases.

TRAFFIC OPERATIONS

As described previously, the City is in the process of developing a multimodal level of service standard that will incorporate a corridor travel time metric that will establish minimum travel speeds along select corridors. The travel time metric will be used to assess potential impacts and determine transportation needs for the City. It is anticipated that with increases in traffic volumes, travel times will also increase without implementation of transportation improvements.

a. Represents the percentage that the No Action Alternative results in an increase compared to existing conditions.

State routes will be incorporated into the travel time metric; however, they are also evaluated against the intersection operations-based LOS standard.

Table 7-4 summarizes the state route (US 2, SR 522, and SR 203) weekday PM peak hour intersection operations for the No Action Alternative and compares the No Action Alternative to the 2035 condition under the 2015 Comprehensive Plan.

TABLE 7-4 2035 Condition and No Action Alternative Weekday PM Peak Hour Intersection LOS for State Routes

		2035 Condition (2015 Comprehensive Plan) ^a			No Action Alternative 2050°		
Intersection	LOS Standard	LOSb	Delay ^c	v/c ^d	LOS	Delay	v/c
Fryelands Blvd/US 2	D	D	41	_	E	71	_
SR 522 SB Ramps/Main St	D	В	13	_	Α	5	0.328
SR 522 NB Ramps/Main St/Tester Rd	D	F	94	_	Α	8	0.648
179th Ave/US 2	D	С	33	_	F	107	_
SR 522 Ramps/US 2	D	D	40	_	В	20	_
Kelsey St/US 2	D	D	54	_	D	50	_
Lewis St (SR 203)/Main St	D	F	115	_	С	29	_
Lewis St (SR 203)/US 2	D	E	58	_	E	62	_
Main St/US 2	D	С	31	_	D	45	_

SOURCE: City of Monroe 2015 Comprehensive Plan, Appendix D, Transportation Plan, 2015; Transpo Group 2024

As shown in **Table 7-4**, the No Action Alternative results in improved operations compared to the 2035 condition under the 2015 Comprehensive Plan due to improvements such as the SR 522/Main Street roundabouts and restricted turns at the Lewis Street/Main Street intersection that have occurred since the 2015 Comprehensive Plan. Most state route intersections are forecast to meet LOS standards, except for two intersections:

- Fryelands Boulevard/US 2 LOS D to LOS E.
- 179th Avenue/US 2 LOS C to LOS F.

a. **Bold** = does not meet LOS standard.

b. Level of service (LOS), based on Highway Capacity Manual (HCM) 7th Edition methodology unless otherwise noted. The 2035 results were completed under HCM 2010 methodologies using the HCM 6th Edition.

c. Average delay in seconds per vehicle.

d. Volume to capacity (V/C) ratio for roundabout-controlled intersections.

In addition, Lewis Street/US 2 will operate at LOS E under the No Action Alternative and with the 2035 condition with the continuation of the 2015 Comprehensive Plan. The No Action Alternative would result in a **significant impact** on traffic operations because LOS standards would not be met at Fryelands Boulevard/US 2 and at 179th Avenue/US 2 intersections.

TRAFFIC SAFETY

As described in the discussion on traffic volumes, the No Action Alternative results in an over 30 percent increase in weekday PM peak hour trips in the City. It is anticipated with the No Action Alternative the potential for transportation safety issues in the City will increase. The No Action Alternative includes goals and policies focused on improving safety for all road users through street designs that accommodate all travel modes (Monroe 2015 Transportation Plan). The No Action Alternative would result in a **less-than-significant impact** on traffic safety.

TRANSIT SERVICE

The No Action Alternative includes partnering with Community Transit and other transit operators to provide transit stop amenities and safe access to transit at major transit stops and park-and-ride facilities. The No Action Alternative is anticipated to make strides towards achieving a yellow LOS for transit corridors. Although Community Transit has identified increased transit frequency for Monroe, implementation of Community Transit's plans are outside of the City's control; therefore, some corridors could continue to be below the target yellow LOS standard, resulting in a **less-than-significant impact** on transit service.

FREIGHT AND PASSENGER RAIL TRAFFIC

The growth in Monroe housing and jobs under the No Action Alternative would not result in freight traffic increases. The No Action Alternative would result in **no impact** on freight and passenger rail traffic.

PEDESTRIAN AND BICYCLE FACILITIES

Under the No Action Alternative, the pedestrian and bicycle network would be consistent with the 2015 Comprehensive Plan. A **less-than-significant impact** on pedestrian and bicycle facilities is expected.

7.2.4 Impacts of the Proposed Action

The impacts of the Proposed Action are assessed against the No Action Alternative based on the methods and thresholds of significance described in Section 7.2.1.

TRAFFIC VOLUMES

As described previously, similar to the No Action Alternative, Proposed Action 2050 traffic forecasts were developed using the City's Travel Demand Model. **Table 7-5** shows the Proposed Action weekday PM peak hour trip generation and vehicle miles traveled (VMT) compared to the No Action Alternative. As shown in the table, additional growth in land use with the Proposed Action results in 3 percent more weekday PM peak hour trips and 1 percent more VMT compared to the No Action Alternative.

TABLE 7-5 Comparison of No Action Alternative and Proposed Action Trips and Vehicle Miles Traveled

	No Action Alternative	Proposed Action	Percent Increase ^a
Weekday PM Peak Hour Trips	16,547	17,047	3%
Vehicle Miles Traveled (VMT)	50,972	51,712	1%

SOURCE: City of Monroe Travel Demand Model, Transpo Group, 2024 NOTES:

The increase in weekday PM peak hour trips and VMT for the Proposed Action results in traffic volume increases at the study intersection. The PM peak hour volumes at the study intersections are expected to increase on average by approximately 30 percent under Proposed Action compared to existing conditions. The Proposed Action increase in intersection traffic volumes is similar to the No Action Alternative, except for a few instances of slightly higher volume increases due to the additional growth in land use and some lower traffic volume increases due to different areas of the City being developed with the Proposed Action. The Proposed Action increases in traffic volumes at the Chain Lake Road intersection is approximately 10 percent more than the No Action Alternative. The 179th Avenue Proposed Action intersection traffic volumes are anticipated to be 10 percent lower than the No Action

a. Represents the percentage that the Proposed Action results in an increase compared to the No Action Alternative.

Alternative. The evaluation of and significance conclusions for traffic operations (below) consider traffic volume increases.

TRAFFIC OPERATIONS

The City's future multimodal level of service standard and corridor travel time metric will be used to assess potential impacts and determine transportation needs for the City related to the Proposed Action land uses. Increases in traffic volumes are expected to result in increases to travel times unless transportation improvements are implemented.

Table 7-6 summarizes the state route (US 2, SR 522, and SR 203) weekday PM peak hour intersection operations for the Proposed Action compared to the No Action Alternative.

TABLE 7-6 2050 Weekday PM Peak Hour Intersection LOS for State Routes

	LOS	No Action Alternative ^a			Proposed Action ^a		
Intersection	Standard	LOSb	Delay	v/c ^d	LOS	Delay	v/c
Fryelands Blvd/US 2	D	E	71	_	E	76	_
SR 522 SB Ramps/Main St	D	Α	5	0.328	Α	5	0.342
SR 522 NB Ramps/Main St/Tester Rd	D	Α	8	0.648	Α	9	0.774
179th Ave/US 2	D	F	107	_	F	117	_
SR 522 Ramps/US 2	D	В	20	_	С	22	_
Kelsey St/US 2	D	D	50	_	D	49	_
Lewis St (SR 203)/Main St	D	С	29	_	С	23	_
Lewis St (SR 203)/US 2	D	E	62	_	E	65	_
Main St/US 2	D	D	45	_	D	44	_

SOURCE: Transpo Group 2024

As shown in **Table 7-6**, the Proposed Action has impacts similar to the No Action Alternative. Similar to the No Action Alternative, under the Proposed Action, the Fryelands Boulevard/US 2 and Lewis Street/US 2 intersections would continue operate at LOS E with an increase in delay of 5 seconds or less. The 179th Avenue/US 2 intersection would continue to operate at LOS F under the Proposed Action, similar to the No Action Alternative, except with an increase

a. **Bold** = does not meet LOS standard.

b. Level of service (LOS), based on Highway Capacity Manual (HCM) 7th Edition methodology unless otherwise noted.

c. Average delay in seconds per vehicle.

d. Volume to capacity (V/C) ratio for roundabout-controlled intersections.

in delay of 10 seconds compared to the No Action Alternative. The Proposed Action would therefore result in a **significant impact** on traffic volumes due to the increase in delay at the 179th Avenue/US 2 intersection.

TRAFFIC SAFETY

Impacts would be the similar to those under the No Action Alternative, except that more traffic safety issues would result from the Proposed Action due to more jobs and housing, and therefore number of vehicle trips. The Proposed Action would result in a **less-than-significant impact** on traffic safety.

TRANSIT SERVICE

Impacts on transit service under the Proposed Action would be the same as the No Action Alternative, resulting in a **less-than-significant impact** on transit service.

FREIGHT AND PASSENGER TRAIN TRAFFIC

Freight and passenger train traffic impacts under the Proposed Action would be the same as the No Action Alternative. The Proposed Action would result in **no impact** on freight and passenger rail traffic.

PEDESTRIAN AND BICYCLE FACILITIES

The Proposed Action includes improvements to the pedestrian and bicycle network to improve access, connectivity, and safety. A **less-than-significant impact** on pedestrian and bicycle facilities is expected.

7.2.5 Summary of Impacts

Both alternatives are expected to result in similar impacts, with the intensity of the impacts increasing as population and employment levels increase under the Proposed Action.

The No Action Alternative results in a 34 percent increase in weekday PM peak hour trips and 25 percent increase in VMT compared to existing conditions. The PM peak hour volumes at the study intersections would increase on average by approximately 30 percent compared to existing conditions. The No Action Alternative would result in a significant impact on traffic operations because LOS standards would not be met at Fryelands Boulevard/US 2 and at 179th Avenue/US 2 intersections. Safety issues would accompany increased traffic volumes and worsening

LOS; goals and policies focused on improving safety for all travel users and modes would reduce the impacts on traffic safety to a less-than-significant impact. Although the No Action Alternative would support working toward a yellow LOS for transit and Community Transit has identified increased transit frequency for Monroe, some corridors could continue to operate below the target yellow LOS standard, resulting in a less-than-significant impact on transit service.

The growth in housing and jobs under the No Action Alternative would not result in freight traffic increases; therefore, no impact on rail traffic would occur. The City's new multimodal LOS standard (development of which is in progress) will be used to confirm impacts to pedestrian and bicycle facilities. However, the No Action Alternative would increase demand for pedestrian and bicycle facilities due to the increased development and population, resulting in a less-than-significant impact to pedestrian and bicycle facilities.

Under the Proposed Action, additional growth in land use would result in 3 percent more weekday PM peak hour trips and 1 percent more VMT compared to the No Action Alternative. The increase in intersection traffic volumes is similar to the No Action Alternative, except slightly higher volume increases. The 179th Avenue/US 2 intersection would continue to operate at LOS F, similar to the No Action Alternative, but with a 10-second increase in delay. The Proposed Action would result in a significant impact on traffic volumes due to this increase in delay. Safety issues would accompany increased traffic volumes similar to under the No Action Alternative, and goals and policies focused on improving safety for all travel users and modes would reduce the impacts on traffic safety to a less-than-significant impact. Impacts on transit service and rail traffic under the Proposed Action would be the same as the No Action Alternative, resulting in a less-than-significant impact on transit service and no impact on rail traffic. Impacts of the Proposed Action on the pedestrian and bicycle network would be the same as under the No Action Alternative.

7.3 Avoidance, Minimization, and Mitigation Measures

Mitigation measures will be needed to support growth while reducing adverse impacts under each alternative. Both alternatives would implement policies that address circulation system classification and design, concurrency standards, transit coordination and improvements, active transportation facilities, financing including transportation impact fees, and joint transportation planning, among other policies.

The No Action Alternative will continue to implement the 2015 Transportation Plan while the Proposed Action implementing the revised 2024 Transportation Plan with new and existing street improvements to enhance traffic flow, multi-modal mobility, facilitate development consistent with the 2024 Comprehensive Plan Update Land Use Element, and adoption of a multimodal LOS standard. The 2024 Comprehensive Plan Transportation Element under the Proposed Action would include a comprehensive list of improvement projects and programs to meet the existing forecast transportation needs of the City and reduce adverse impacts on transportation. The multimodal improvements address safety, capacity, trail connections, expanded non-motorized transportation facilities, and roadway preservation needs. They also cover upgrades to existing roads and interconnected street systems to support the forecast economic development and growth in the City and its UGA. The roadway and intersection projects incorporate needs for pedestrians and bicyclists that will use the same corridors.

The City is committed to reassessing their transportation needs and funding sources each year as part of their annual Six-Year TIP. This allows the City to match the financing program with the shorter-term improvement projects and funding. The Transportation Plan also includes goals and policies to periodically review land use growth, adopted level of service standards, and funding sources to ensure they support one another and meet concurrency requirements.

Demand management strategies would be in place under both alternatives, consistent with current conditions including the CTR program. The goal of demand management strategies is to reduce the number of vehicular trips; therefore, demand management would reduce impacts under both alternatives associated with traffic volumes and operations.

7.4 Significant, Unavoidable Adverse Impacts

After implementation of mitigation measures, each alternative is expected to result in significant, unavoidable adverse impacts on transportation operations.

Future jobs and housing growth will result in increased traffic volumes. Under both alternatives, the City would have established levels of service that would be met with proposed transportation improvements and programs. Greater mobility through bicycling and walking is anticipated to be achieved with the proposed non-motorized plan, under the Proposed Action. Although congestion can be addressed through the mitigation measures presented in Section 7.3, the increase in auto traffic itself is considered a significant unavoidable adverse impact.