

TRANSPORTATION

1. EXISTING INFRASTRUCTURE AND SERVICES

Below are the existing facilities and services available within the Manchester Village boundary. (**Figure 6**)

Ferry Facilities

Southworth Ferry Terminal is located at the intersection of S.E. Southworth Drive and S.E. Sedgwick Road, at Point Southworth. Washington State Ferries provides walk-on and vehicle service to Vashon Island and Fauntleroy / West Seattle. Approximately twenty-six ferry trips are scheduled daily Monday through Friday, with 24 trips per day on weekends. U-Park System operates a parking lot at the terminal, which provides 340 paid parking stalls, including carpool and handicapped spaces.

Kitsap Transit provides daily passenger-only ferry service from two Port Orchard locations to downtown Bremerton. Ferry service from the dock in downtown Port Orchard is provided during daytime hours, seven days a week, on 30-minute headways. A paid parking lot is operated by the City, and provides approximately 115 stalls. About 75 free short-term parking spaces are also available. Ferry service from the Annapolis dock, located on Beach Drive just east of Port Orchard, is provided on weekdays only, also at 30-minute headways during daytime hours. Seventy-four paid parking stalls are provided and operated by Kitsap Transit at the Annapolis ferry dock.

Roads

Mile Hill Drive is classified as an urban minor arterial. It runs east/west from Bethel Avenue to a Y-intersection, where it turns into Colchester Drive S.E. and S.E. Southworth Drive. In the Manchester vicinity it has a three-lane cross-section, with paved shoulders. The posted speed limit is 45 mph.

Beach Drive is a two-lane urban minor arterial, which runs east from the Port Orchard boat launch to Wynn-Jones County Park where it runs north/south to E. Main Street in Manchester. The posted speed limit is 25 mph in the Manchester downtown area, and 35 mph north of Manchester and into Port Orchard.

Alaska Avenue E. is a two-lane roadway, running from Mile Hill Drive in the south to dead end at Montana St. in the north. Alaska Avenue is classified as an urban collector. The posted speed limit is 35 mph.

California Avenue is classified as an urban collector that connects to Garfield Avenue SE and Locker Road SE in the south, crosses Mile Hill Drive, and links to the east-west collector Chester Rd, then north to E. Grandview St. It is a two-lane roadway. The posted speed limit is 35 mph.

E. Chester Road is a two-lane roadway classified as an urban collector, and is the primary east-west route through Manchester. It runs from Woods Rd in the west,

crosses California Ave. and ends at Alaska Ave. Chester Rd provides a connection to Downtown Manchester via Madrone Ave and Main St to the east. The posted speed limit is 30 mph.

Madrone Avenue is a two-lane urban collector that connects to Chester Rd on the west, crosses Alaska Ave, and continues to Main St on the east. It is a two-lane roadway. The speed limit is 25 mph.

Main Street is a two-lane urban collector from 3rd Ave on the west to Beach Dr, then is classified as an urban minor arterial to Colchester Dr, then is classified as a local access road to its terminus at the boat launch and dock. The short section of Main St, from Beach Dr to Colchester Dr, is the connection that completes the primary north-south route through Manchester. The speed limit is 25 mph.

Colchester Drive is classified as an urban minor arterial. It is a two-lane roadway, which runs from the Y at Mile Hill Road and S.E. Southworth Drive north to E. Main St. Posted speed limits are 40 mph for most of the road, but 25 mph in the downtown area.

Non-Motorized Facilities

These facilities are typically located along roadways as bike lanes, sidewalks, paths or as separated mixed-use facilities, and provide opportunities for both recreational and commuter users.

The east side of California Avenue has a small paved walkway from Mile Hill Dr. to the Manchester Elementary School. The east side of Colchester Dr also has paved shoulders to accommodate bicycles and pedestrian activity and is considered a portion of the Mosquito Fleet Trail.

The Mosquito Fleet Trail is a planned facility that connects the historic docks of the Mosquito Fleet Ferry System, from Southworth to Kingston, with a fully connected bicycle and pedestrian trail system. The route runs through Manchester via Colchester Dr and Beach Dr.

Water Facilities

The Port of Manchester's facilities include a single-lane boat launch, a moorage dock (moorage allowed from 6:00 AM to 10 PM), a fishing dock and Pomeroy Park, a community park and beach adjacent to the boat launch. Additional undeveloped park property is located at Haida Dr. The Port has two parking lots; one located next to the launch and another adjacent to the Manchester Library. Combined these lots have the parking capacity for 21 truck and trailer combinations and 25 passenger vehicles.

Transit Services

Kitsap Transit provides bus, vanpool and ACCESS services to the Manchester area. Currently, Route #86 has two stops in central Manchester, one at the Post Office on Colchester and the other on the corner of Alaska Ave and Madrone Ave. There are also a number of stops on California Ave and Colchester Dr. This route delivers passengers to a variety of locations between the Port Orchard and Southworth Ferry Terminals.

Kitsap Transit's fleet of vanpool vehicles are available for groups of five or more. Vanpools provide the flexibility of serving a number of businesses with a number of different pick-up points. Kitsap Transit also serves the disabled or elderly through their ACCESS shuttle program. These shuttles are specially designed for the needs of their clientele providing home to destination service. Worker driver buses also serve the area.

The nearest Park & Ride facilities are located at the Southworth and Annapolis ferry docks, and at Harper Church on SR 166 just west of Southworth.

2. TRAFFIC ANALYSIS

Methodology

Level of service (LOS) designations are qualitative measures of congestion that describe operational conditions within a traffic stream and take into consideration such factors as volume, speed, travel time, and delay. LOS is represented by letter grades, A through F. LOS A through C imply traffic flows with minimal delay, while LOS D and E imply conditions that approach capacity, and LOS F implies unstable flow with potential for substantial delays (Transportation Research Board 2000). The characteristics of the six LOS designations for roadway segments and intersections are summarized below. The LOS scale has been adopted by the Institute of Transportation Engineers, the Transportation Research Board, and by most jurisdictions throughout the country.

LOS Descriptions for Roadways

A - Describes primarily free flow operations at average travel speeds, usually about 90% of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream.

B - Represents reasonably unimpeded operations at average travel speeds, usually about 70% of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.

C - Represents stable conditions; however, ability to maneuver and change lanes in mid block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50% of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving.

D - Borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40% of free flow speed

E - Characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of

adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.

F - Characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.

Source: Transportation Research Board 2000

Kitsap County uses traditional engineering methodology to evaluate LOS of roadway segments, which are sections of roadway located between major intersections. Roadway travel volumes are compared to roadway capacity to develop a ratio known as volume-to-capacity (V/C). The volume-to-capacity ratios relate directly to measures of level of service. Table T-1 shows the relationships between LOS and V/C ratios on a roadway segment.

The maximum theoretical vehicle-carrying capacity of a roadway is determined to be approximately 18,000 to 22,000 vehicles per lane per day. There are, however, many factors that can reduce the actual capacity of particular roadway segments. These factors include lower posted speeds, the presence of driveways or cross-streets, narrow lane widths, and pedestrian activity. The placement of traffic signals can also lower the capacity of a roadway segment.

Table T-1. LOS and V/C Comparison

Level of Service	Volume-to-Capacity Ratio
A	≤ 0.60
B	0.60 to 0.69
C	0.70 to 0.79
D	0.80 to 0.89
E	0.90 to 0.99
F	≥ 1.00

Level of Service Standards

The county has adopted LOS D ($v/c \leq 0.89$) as the minimal standard for roadways and intersections within the urban growth area, and LOS C ($v/c \leq 0.79$) for rural roadways. All roadways in the Manchester area are considered to be rural in nature (minimum LOS of C).

Existing Conditions

Average Daily Traffic (ADT) volumes collected during the summer months of 2005 and 2006 were used for analysis of existing conditions.

Based on the existing roadway conditions and daily traffic volumes, most roadway segments providing access to the area under normal conditions presently operate at or better than the acceptable Level of Service standards for Kitsap County roadways (Table T-2). Mile Hill Drive (west of California Ave) is the exception. This section of roadway is currently operating at Level of Service “D” with a V/C ratio of 0.86.

Table T-2, Existing LOS and V/C Comparison

Roadway	Existing				County Standard	
	Volume	Capacity	V/C	LOS	V/C	LOS
Alaska Ave	2,329	9,600	0.24	A	0.79	C
Beach Dr	1,410	11,700	0.12	A	0.79	C
California Ave	4,263	9,600	0.44	A	0.79	C
Chester Rd	1,512	9,600	0.16	A	0.79	C
Colchester Dr	2,182	11,700	0.19	A	0.79	C
Madrone Ave	2,276	9,600	0.24	A	0.79	C
Mile Hill Dr (East of Calif. Ave)	9,055	15,300	0.59	A	0.79	C
Mile Hill Dr (West of Calif. Ave)	13,211	15,300	0.86	D	0.79	C
Southworth Dr	5,647	14,600	0.39	A	0.79	C

Future Conditions

Projections of future (2025) traffic volumes, based on land use and population projections, were modeled during the countywide Comprehensive Plan update in 2006. State and County roadway improvements, which are expected to be completed prior to 2025, were taken into account. The widening of Mile Hill Drive, Bethel Road, Sedgwick Road (SR-160) and the new Tacoma Narrows Bridge are among those projects. A complete listing of these improvements is located in the Kitsap County Comprehensive Plan. Projected 2025 volumes and levels of service are shown in Table T-3.

Based on projected 2025 traffic volumes and roadway conditions, most roadways are expected to operate at acceptable levels of service, again with the exception of Mile Hill Road - West of California Ave. It is proposed that Mile Hill Drive again be widened to 4-lanes in order to accommodate projected traffic.

Table T-3, Future (2025) LOS and V/C Comparison

Roadway	2025				County Standard	
	Volume	Capacity	V/C	LOS	V/C	LOS
Alaska Ave	2,769	9,600	0.29	A	0.79	C
Beach Dr	1,410	11,700	0.12	A	0.79	C
California Ave	5,959	9,600	0.62	B	0.79	C
Chester Rd	1,623	9,600	0.17	A	0.79	C
Colchester Dr	3,932	11,700	0.34	A	0.79	C

Madrone Ave	3,061	9,600	0.32	A	0.79	C
Mile Hill Dr (East of Calif. Ave)	9,467	15,300	0.62	B	0.79	C
Mile Hill Dr (West of Calif. Ave)	15,331	15,300	1.00	F	0.79	C
Southworth Dr	8,070	14,600	0.55	A	0.79	C

3. CURRENT SCHEDULED IMPROVEMENTS

Kitsap County Transportation Improvement Program (TIP)

The Kitsap County Six-Year Transportation Improvement Program (2007-2012) includes the following roadway improvement, which is now completed, in the Manchester area:

Mile Hill Drive was widened to three lanes between Long Lake Road and Colchester Drive. New traffic signals were installed at the intersection of Long Lake Rd and at California Ave. Construction was completed in the Spring of 2007.

The Mosquito Fleet Trail Plan

The Mosquito Fleet Trail is a planned facility that connects the historic docks of the Mosquito Fleet Ferry System. The plan includes Beach and Colchester Drives as a primary corridor of the Mosquito Fleet Trail, which extends from the Southworth Ferry, north through Manchester along Colchester and Beach Drives later terminating in Kingston. A separated path is envisioned for the trail segment along Colchester.

4. FINANCIAL PLAN FOR TRANSPORTATION IMPROVEMENTS

All transportation improvements need specific funding sources for their development. All improvements necessitated within the Manchester Sub-Area may be funded through any of the following sources: County Road Levy, Local Option Motor Vehicle Fuel Tax, Local Option Motor Vehicle License Fee, Impact Mitigation Fees, Transportation Benefit Districts or County Road Improvement Districts. Each of these sources is discussed at length in the Transportation Chapter of the Kitsap County Comprehensive Plan (2006).

5. GOALS AND POLICIES

The goals and policies contained in this chapter are those that most pertain to Manchester. They provide the framework for short-range and long-range transportation planning and implementation decisions required of Kitsap County.

Goal T-1 Encourage street designs and development patterns that accommodate pedestrians, vehicles, transit users and bicyclists in a balanced way.

Policy T-1 Within the transportation section the term “walkway” shall be understood to mean “sidewalk or walkway” within the Manchester Commercial District, with sidewalks

mandatory if either property adjacent has already incorporated sidewalks, or if properties on both sides within 100 feet have incorporated sidewalks. All walkways shall be fully consistent with the Americans with Disabilities Act.

Policy T-2 Directional signage for public facilities shall be sized and located to be easily read from an approaching vehicle and pedestrians. All rules and regulations pertaining to prohibitions and recommended behavior shall be clearly posted in locations that sustain appropriate compliance.

Policy T-3 Develop design guidelines for Roads, Parking, Walkways, Amenities and Signage. These design guidelines shall cover the Commercial District and residential areas of Manchester.

Policy T-4 All future County projects along Beach Dr., Colchester Dr., Chester Rd., Madrone St., Alaska Ave. and California Ave., shall include continuous 5-foot paved walkways for pedestrian use. These walkways shall be coordinated with the Mosquito Fleet Trail Plan as necessary.

Policy T-5 Developments abutting County rights-of-way within the Commercial District (Figure 3) boundary shall require sidewalk construction.

Policy T-6 Developers shall install sidewalks or 5-foot paved walkways on all interior roadways in all new developments of four (4) or more parcels. These sidewalks or walkways should be on the uphill side of the street when possible to allow for grassy swales to filter pollutants.

Goal T-2 Encourage development of an efficient multimodal transportation system and develop a funding strategy and financing plan to meet its needs.

Policy T-7 The County shall facilitate the development of the Mosquito Fleet Trail improvements within the Manchester Village Boundary.

Policy T-8 Transit travel should be facilitated in all ways reasonable. Encourage the expansion of Kitsap Transit's route #86 to increase trip frequency within the Manchester Village Boundary. Bus Stops should be limited to areas where traffic in either direction is not inhibited (e.g., where at least an 8-foot shoulder exists).

Policy T-9 Provide sufficient flexibility in the funding process to maximize the ability for local government to develop partnerships with the private sector to optimize funding sources for transportation projects.

Goal T-3 Provide the citizens the opportunity to participate in the development of transportation planning policy.

Policy T-10 Encourage citizen participation, organizations or individuals, in County transportation planning efforts within the Manchester Village.

Policy T-11 Include a Manchester Planning Committee in the Kitsap County Public Works planning process to provide input for and act on all public works plans that affect the Manchester LAMIRD.

Goal T-4 Establish minimum level of service standards for transportation facilities in accordance with the requirements of the Growth Management Act.

Policy T-12 Transportation improvements shall be available to support planned growth at adopted levels of service concurrent with development.

Goal T-5 Reduce accidents and potential accidents by providing a safe transportation system through good design practices.

Policy T-13 Analyze accident data to determine where safety-related improvements are necessary. Prioritize and implement safety-related improvements during the transportation planning process.

Policy T-14 All parking lots in the Commercial District should incorporate separate entrance and exit lanes where possible.

Goal T-6 Minimize negative environmental impacts by the transportation system.

Policy T-15 Maintain environmental standards and mitigation requirements that are the same or higher than those placed upon the private sector.

Goal T-7 Protect existing private residential lanes from commercial traffic impacts.

Policy T-16 Prohibit commercial development from utilizing private residential lanes as access points.

Goal T-8 Increase available parking in the Manchester Commercial District.

Policy T-17 Encourage all new development in the Commercial District to provide diagonal head-in parking.

Policy T-18 Require all road projects that include the Manchester Commercial District to widen the road to accommodate diagonal head-in parking on both sides of the road where right of way is available.