

Transportation

This chapter describes the transportation system, identifies deficiencies within the transportation facilities serving Winthrop, and provides general recommendations for meeting the existing and future needs of those facilities and transportation system. This chapter also addresses how Winthrop can provide the most cost-effective transportation choices, while the Future Land Use Plan and Local Economy chapter address how the town can manage development to make the best use of the system.

As Winthrop becomes more complex and interwoven with neighboring communities, the need for a high-quality transportation system becomes more critical. Businesses need transportation to move products and draw customers. Commuters need a way to get to their jobs out of town, and employers need a way to get out-of-town workers here. Families need transportation for schools, services, shopping, and recreation. Finally, tourists and summer residents need a way to get here. In short, the transportation system is crucial to the future of Winthrop.

Winthrop's Highway System:

State Highways:

The Maine Department of Transportation (MDOT) classifies roads by the role they serve in the overall transportation network. The principal classifications are:

- Arterials:** These are the most important travel routes in the state. Arterial roads are designated for their capacity to carry large volumes of traffic efficiently between commercial or service centers. The MDOT has restrictive access standards on arterial roads to preserve this mobility function. These highways carry a federal route number designation, such as U.S. Route 202 and Route 133, both of which are minor arterials.
- Collectors:** These are roads that collect and distribute traffic from areas of lower population density onto arterials. Collectors are further divided into "major" and "minor," depending on the proportions of federal, state, and local money available for maintenance and improvements. In Winthrop, Routes 41 and Main Street are classified as Major Collectors and Route 135 is a Minor Collector.

State highways are maintained by the MDOT except that towns are responsible for winter maintenance (plowing) and pavement condition repairs and summer maintenance on state-aid roads (Route 135 and Main Street). Maintenance and improvement projects performed by MDOT are programmed into the state budget through a Biennial Transportation Improvement Program (BTIP). This program outlines transportation projects (including non-road projects) that have been funded with a combination of federal and state funds.

The backbone of the transportation system is the state highway system, designed to accommodate motor vehicles. Winthrop's state highways are U.S. Route 202 (Route

202), ME Route 133, and ME Route 41, while ME Route 135 and Main Street are state-aid highways.

U.S. Route 202: The principal highway through Winthrop, Route 202 is also one of the state's major highway corridors. It connects Augusta with Lewiston on a modern, well-built highway. The state classifies it as a "retrograde arterial," which dates back to the Access Management Law. The term describes roadways on which the state is interested in limiting new access points if practicable. Landowners are encouraged to consolidate/share access points and allow only new ones where either shared access points are not an option or where there is not ample site distance for safe access. The thinking was that over time, increased access points would erode mobility and reduce speed limits, resulting in costly bypasses and new roads.

Route 202, currently in 2023, does not require any improvements to the highway surface. The state has performed periodic maintenance to this route as necessary, including resurfacing a portion in 2011, and treating sections in 2015, 2019, and 2020. This ongoing maintenance conducted by the state will continue as needed.

ME Route 133 originates in Winthrop Village together with Route 41, but branches from the latter about 1.5 miles north. It proceeds westward through Wayne and into Androscoggin County toward Jay and Livermore Falls. It is a two-lane, minor arterial, probably because of the volume of heavy truck traffic it carries from the Jay-Livermore Falls area. The condition of Route 133 is good. It has been rebuilt to accommodate the level of truck traffic. This route received preservation maintenance treatment in 2015.

ME Route 41 provides a cross-connection between Winthrop's village and Readfield Village, continuing north through Kents Hill and on to Mount Vernon. It is a two-lane major collector, except for a short portion north of Winthrop town center where, when joined to ME Route 133, it is a minor arterial. A substantial portion of the road is unbuilt, meaning it has never been constructed to engineering specifications. This results in more frequent maintenance and poorer alignment, affecting both speed and safety. The state performed light capital paving (a thin pavement treatment to keep poor, generally lesser traveled roads serviceable) of the entire section of Route 41 in Winthrop in 2021.

ME Route 135 is the north-south route running through eastern Winthrop. It joins Route 17 in Readfield, and serves local development, such as Winthrop Center and the Cobbossee/Narrows Pond seasonal development. Route 135 is also an unbuilt road, with many instances of narrow curves and steep hills. Maine DOT classifies Route 135 as a minor collector. This category of road will never be rebuilt unless the Town pays a third or more of the cost. In 2019, the state performed light capital paving of Route 135.

Main Street is also part of the state highway network because it is the former Route 202. Main Street is the only urban highway, meaning that it has curbs and a closed drainage system (catch basins). This makes maintenance and improvement more expensive. In 2010, the state performed catch basin and closed system drainage repair and replacement on Main Street. In 2010 and 2017, the state also milled and filled portions of Main Street.

Traffic Volumes:

Volume of traffic is a measure of the intensity of road use and the potential for traffic delays, congestion, or unsafe conditions. Economic developers also use traffic volumes to determine potential customer base. Historic traffic count data, measured in Average Annual Daily Traffic (AADT), equivalent to vehicles per day, is compiled by MDOT for state roads in several locations throughout Winthrop.

TABLE 1: AVERAGE ANNUAL DAILY TRAFFIC COUNT

Location	2014	2017
Annabessacook RD S/O Annabessacook DR		860
Annabessacook RD S/O SR11/100/US 202		1,380
Bearce RD N/O Metcalf RD		650
Birch ST W/O SR 41/133	150	160
Bowdoin ST N/O Main ST	2,800	2,540
Bowdoin ST SW/O Green ST @BR #5442	1,250	
Greenwood Ave N/O Main ST	600	580
Highland Ave N/O SR 11/100/US 202	1,830	
Highland Ave S/O SR 11/100/US 202	2,190	
Holmes RD S/O Narrows Pond RD		1,120
Main ST (EB) E/O Hannaford ENT	4,320	4,220
Main ST (WB) E/O Hannaford ENT	4,490	4,150
Main ST E/O Greenwood Ave	8,480	
Main ST E/O Royal ST	6,370	
Main ST NE/O Depot ST	5,820	
Main ST NE/O Morton ST	7,900	
Main ST W/O Highland Ave	8,530	
Metcalf RD NE/O Main ST	990	880
N Wayne RD N/O Innes RD	430	500
Narrows Pond RD W/O SR 135	510	520
Old Lewiston RD NW/O SR 11/100/US 202		1,140
South RD S/O SR 11/100/US 202	800	710
SR 11/100/US 202 (EB) NE/O Main ST		7,390
SR 11/100/US 202 (EB) SW/O Interchange		5,100
SR 11/100/US 202 (WB) NE/O Main ST		7,020
SR 11/100/US 202 (WB) SW/O Interchange		5,340
SR 11/100/US 202 E/O Highland Ave	10,000	
SR 11/100/US 202 E/O SR 135	13,280	14,310
SR 11/100/US 202 NE/O Annabessacook RD		11,620
SR 11/100/US 202 SW/O Old Lewiston RD		7,710
SR 11/100/US 202 W/O Highland Ave	9,700	10,050

Location	2014	2017
SR 11/100/US 202 W/O SR 135	13,060	
SR 11/100/US 202 W/O Welch's Point RD	13,780	14,260
SR 133 (Wayne RD) (EB) W/O SR 41	5,400	2,950
SR 133 (Wayne RD) (WB) W/O SR 41		2,880
SR 133 NW/O Wayne RD @CWY	4,200	4,560
SR 135 (Stanley RD) N/O Metcalf RD	1,100	
SR 135 (Stanley RD) N/O SR 11/100/US 202	1,580	1,760
SR 135 (Stanley RD) S/O Beaver Dam RD		1,140
SR 135 S/O SR 11/100/US 202	1,140	1,080
SR 135 SW/O YMCA Camp DR	1,110	
SR 41 N/O Sturtevant Hill RD	1,910	1,960
SR 41/133 (Western Ave) S/O Main ST	5,080	5,460
SR 41/133 N/O Main ST	6,780	6,910
SR 41/133 N/O Summer ST	8,210	
SR 41/133 NE/O Ramp to SR 11/100/US 202	2,490	
SR 41/133 SW/O Old Western Ave	2,420	
Sturtevant Hill RD NW/O SR 41	1,020	
Summer ST E/O SR 41/133	1,840	1,910
Turtle Run NW/O SR 11/US 202		220

Source: Maine DOT Traffic Volume annual report, 2019

KEY FOR TABLE 1:

SW/O= southwest on
SE/O= southeast on
S/O= south on
NW/O= northwest on

NE/O= northeast on
N/O= north on
W/O= west on
E/O= east on

SR= state route
IR= inventory road
EB= eastbound
WB= westbound

The most recent data available is from 2019, and with the exception of one data point at the intersection of State Route 11/100 and Route 202, westbound on Welch's Point Road, there was no other 2019 annual traffic count information for Winthrop. At this location, the traffic count in 2014 was 13,780. In 2017, it increased to 14,260. In 2019, the traffic count at this location was 14,400.

The state routes and U.S. Route 202 carry the most traffic, based on Table 1. This is not surprising, as they are connecting roads; however, it is surprising to see traffic volumes have not increased significantly, and have, in fact, decreased in some areas.

Part of the declining traffic counts could be attributed to the stable or stagnant economic

conditions from 2015-2018, combined with the aging and decreasing local populations. Most of the traffic along these routes are daily commuters, combined with weekend recreation and tourism activities. Winthrop did not see a significant increase in population during this time. Once data is available for 2020-2021, there will be a further decrease in traffic counts because of impacts from Covid 19.

The Maine DOT has permitting requirements for new driveway entrances onto all state roads, with extensive review of major development, especially on Route 202. This increases the cost of development to maintain the mobility of the road. Route 202 has been and continues to be the focus of Winthrop's commercial development corridor.

Traffic Controls:

Despite having a major highway and a busy downtown area, Winthrop has not yet been overwhelmed with traffic controls. The principal form of controls are designated lanes with islands, entering and exiting Route 202.

A recently implemented traffic control at the eastern end of Main Street and the intersection of Route 202 is known as a 'Florida T' and incorporates median strips. This traffic control measure is a type of three-way intersection, usually used on high-traffic volume roads. The design of these intersections has been proven to provide sustainable benefits compared with traditional T intersections.

Where Route 41 joins Route 202, at the western edge of downtown, there is a separate interchange. Due to the high volume of traffic on Route 202, this stretch of road has flashing traffic signals at two separate locations.

Because Route 202 traverses some hilly sections of Winthrop, there were several climbing/passing lanes put in place when the road was rebuilt. These lanes are only marginally effective. Commercial entrances and road junctions reduce the utility of these lanes. When vehicles must make a left turn from a passing lane, waiting for oncoming traffic creates a conflict; current design practices discourage this. The westbound lanes on Route 202 south of downtown have been altered to allow left turns into the Carleton Mill and Highland Avenue, eliminating a stretch of passing lane. The other instance of this is at the Route 135 junction. There is also, on Route 202, heading west, a 'passing' lane, allowing the single driving lane to become a left-hand turning lane at/into Progressive Distributors and the Hannaford Distribution Center.

While strict enforcement of speed limits is effective, it is also expensive. While assigning a police officer to work full-time in the downtown would be beneficial, one full-time officer may not have enough impact on traffic speeds.

Winthrop is committed to using the standard, federally established traffic control practices and devices identified in the Manual on Uniform Traffic Control Devices (MUTCD), as amended. Further consideration is being given to other forms of traffic control devices and traffic calming measures as speeds and volumes increase.

There are no major conflicts of use on any roads in Winthrop caused by multiple road

uses, despite the traffic volume on Route 202.

Traffic Safety:

A critical element in management of a transportation system is the safe movement of traffic. Records are kept of vehicle accidents, and areas along the highway system are marked as High Crash Locations (HCL). MDOT defines an HCL as a roadway intersection or segment that experiences eight or more accidents in a 3-year period and has a Critical Rate Factor (CRF) of more than 1.00. The CRF is a measure of the actual number of accidents compared to the theoretical accident experience that would normally be expected in that situation.

Meeting both criteria on many rural roads in Winthrop would be difficult – because of the lack of traffic, a high CRF may not be statistically valid. But that means there may be some curves or intersections that are dangerous without being identified as an HCL. Some roads in Winthrop produce a volume of traffic that does meet the criteria.

According to MDOT data from 2022, there are two HCL nodes at the following intersections:

- Annabessacook Road and Old Lewiston Road (Route 202), CRF= 2.14, 12 accidents in reporting period.
- Highland Avenue and Route 202, CRF = 1.95, eight accidents in reporting period.

According to MDOT data from 2022, there are two HCL road segments:

- A 0.08-mile section of road along Main Street in the village area, CRF= 2.67, 10 accidents in reporting period.
- A 1.94-mile section of road along Route 135, south of Route 202, CRF= 1.5, 9 accidents in the reporting period.

Several structural techniques could “calm” traffic in downtown areas, though they are less effective or appropriate in areas outside of the downtown. Shifting the curbing out into the roadway at pedestrian crossings is called a “neckdown” because drivers feel they must slow down to fit through a tighter space, even though the driving lanes are the same width. Pedestrians, meanwhile, feel safer with a shorter distance to cross the road. These were suggested by the 2000 *Downtown Revitalization Plan*. Stamped pavement (imitation cobbles) and speed tables (not speed bumps) also cause drivers to slow. Street trees and other amenities also make Main Street feel less like a highway.

Traffic and Development:

Traffic counts and problem locations are symptoms of a much deeper issue: the relationship between highways and development. As highways are designed to serve the properties within their corridors, there comes a point at which development exceeds the capacity of a highway to serve it. This may result from development within the corridor or development in the immediate proximity of the road.

Major traffic generators in Winthrop, such as the Main Street area, the schools, the Carleton Mill complex, and Progressive Distributors, tax the capacity of roads. The impacts are different in various locations. For example, downtown, high-traffic locations result in congestion and slow travel, whereas on Route 202, local traffic generators produce potential conflict points.

Winthrop's proximity to Augusta creates a lot of traffic on Route 202, not only for commuters, but also for more access to commercial, retail, and service providers. During morning and evening rush hours, Route 202 has increased traffic volumes to accommodate commuters to and from Augusta. In addition, since residents of Wayne, Livermore, and Jay must travel through Winthrop to get to larger service centers, main routes of travel, such as Route 133 and Main Street, see increased traffic volume between the hours of 7:30-8:30 am, although there is less emphasis on the evening rush hour traffic in these areas.

Another significant traffic generator is Winthrop Public Schools. When school is in session, the roads in and around the schools see heavy traffic from parents picking up or dropping off their kids.

Hannaford Supermarket is also a significant contributor to increased traffic volumes, as is the Hannaford Distribution Center (Progressive Distributors) for heavy truck traffic. Policies at Hannaford Distribution Center do not allow over-the-road trucks to park in their parking lot after unloading. This results in trucks parking on the shoulder of Route 202 for their mandatory break from driving. This poses a potential traffic hazard.

Over the past several decades, traffic levels have been increasing. Freight (truck) traffic has grown noticeably with an increasing reliance on roads by freight carriers. In terms of road use, however, automobile traffic has the greatest impact. Most trips originate from the residence and move to places of employment, schools, or commercial/retail districts. The transportation impact of sprawl results in rural residents driving longer distances to get to their destinations. Statistically, this would show up as increased use of roads leading into rural areas and stable or declining use of urban roads (see Table 1).

The Maine DOT has established a set of regulations for new development impacting state highways. Traffic Movement Permits are required for major developments, such as shopping centers or large subdivisions. For all other developments on state highways, driveway access permits are required. Permitting rules contain different standards based on road classification. Route 202 has the tightest access rules, followed by Routes 133, 41, and 135; the remaining roads have moderate rules. All the rules have some standards for sight distance, driveway width, spacing, safety, and drainage.

Winthrop's access management and traffic permitting measures are currently limited to a Road Openings Policy for curb cuts and driveways, which references the Maine Revised Statutes Annotated. The town relies predominantly on the state's regulations for the major route through town.

There are several other ways in which the town can influence the impact of development

on transportation. They include:

- Updating local road design and construction standards to reflect current practices.
- Offering different road design options based upon anticipated use and traffic volume.
- Rear lot access options to reduce road frontage development.
- Incorporating pedestrian and bicycle travel lanes into public roads and major developments.
- Proper design and location of major land use activities.
- Continue the ongoing roadway and pavement repair and/or replacement according to Winthrop's road maintenance plan.

Local Roads:

Local roads are roads that provide access to adjacent land areas and usually carry low volumes of traffic. In Maine, these roads are the responsibility of the municipality if they are town ways, or private responsibility if they are camp roads, logging roads or have not been dedicated and accepted by the Town. There are many private roads, primarily serving camp communities, but the town bears no legal liability for these and there has been no concerted move to convert them to town roads. There have been no issues in the past 10 years with substandard private roads being accepted by the town.

Town Ways:

The Town maintains 48.6 miles of town ways. The function and condition of these roads varies, from downtown side streets to narrow, rural roads. The town maintains a complete inventory of these roads. Significant roads include:

- Memorial Drive - accessing Maranacook Lake properties on the east side,
- Annabessacook Road - providing access to the western shore of Annabessacook Lake,
- Highland Avenue - connecting the urban areas north and south of Route 202,
- Old Lewiston Road - a former segment of Route 202 in the southwestern portion of town,
- High Street - serving housing blocks and subdivisions west of Route 41 downtown,
- Sturtevant Hill Road - accessing the northwest quadrant of town.

Current Ordinances:

The town has a Road and Street Construction Ordinance, enacted in 1991 and amended through 1995. The ordinance applies to all newly constructed or upgraded streets, both public and private, and is cited as the construction standard in the subdivision ordinance.

The Subdivision Ordinance, enacted in 1990 and amended through 1995, and the Zoning Ordinance also have a few standards and requirements for newly created roads and road upgrades.

Due to the age of the design standards of the Road and Street Construction Ordinance and the Subdivision Ordinance, they do not require the consideration of bicycle travel and only minimally consider pedestrian traffic. Under Section IV. Design Standards, the Road and Street Construction Ordinance set standards for sidewalk construction but does not require that they are constructed.

Overall, the design standards meet Winthrop's desired land use pattern; however, both the Road and Street Construction Ordinance and the Subdivision Ordinance, where it pertains to subdivision roads, need updating to reflect the latest standards and technology.

The Subdivision Ordinance does not require that subdivision roads consider future expansion or allow for the creation of a network to other local streets. There is no mechanism in place to limit the length of dead-end roads in subdivisions to produce compact and efficient subdivision design. The only criteria in the Subdivision Ordinance that relates to dead-end roads is a requirement that private dead-end roads shall have a turnaround or cul-de-sac with a 50-foot-wide right-of-way. For subdivision roads to be accepted by the municipality, they are required by the Road and Street Construction Ordinance to have a 60-foot-wide right-of-way in an approved cul-de-sac or turnaround area to specification as diagrammed in the ordinance.

Town Roads, Facilities, and Services:

The appointed Road Commissioner is the Town Manager, and it is his responsibility to manage town ways. Winthrop does not currently have a Road Committee; however, such a committee could provide the structure needed to develop a long-term maintenance plan for the roads in town.

Winthrop's Public Works Department maintains all municipally owned properties, streets, sidewalks, trees, landscaping, buildings and grounds, streetlights, and traffic signals. They also provide street sweeping, snow removal and ice control.

The budget for road maintenance is part of the Capital Investment Plan, specifically, paving, drainage, and culvert replacement. For the fiscal year 2024, the Town of Winthrop has allotted a budget of \$53,500 for summer road maintenance.

Winthrop has raised and appropriated \$350,000 for paving and \$25,000 for drainage and culvert replacement each of the last few years. For the 2024 fiscal year, the paving budget increased to \$500,000. Through reviewing and revising the Capital Investment Plan on a yearly basis, Winthrop adequately budgets for all road maintenance.

To prevent any unnecessary expenditures, Winthrop makes every effort to cooperate and coordinate road work with the Maine DOT Work Plan to the greatest extent practicable.

A large contributor to most towns' road budget is the cost of sanding and plowing. For the last four years, Winthrop's sanding and plowing budget has increased steadily. Table 2 shows this increase.

TABLE 2: INCREASE OF THE SANDING AND PLOWING COST FROM 2020 TO 2024

Year	Budget for Sanding & Plowing
2020	\$78,620
2021	\$89,955
2022	\$90,645
2023	\$116,770
2024	\$127,500

Source: Winthrop's Budget and Financial Records

Recent projects completed by Winthrop's Public Works Department include a three-year project on Memorial Drive that consisted of drainage work, asphalt reclaiming and paving to improve road conditions. Future projects are predominantly routine paving for predetermined roads throughout town.

Other Roads:

Other roads include over 100 privately owned roads throughout town. The most common of these are camp roads. Camp roads provide access to waterfront properties and do not form a part of the public road network. These roads were named during the Street Addressing Project (E-911). Other privately owned roads in Winthrop include roads in approved subdivisions that have not been offered to or accepted by the town. The Town of Winthrop has no legal right or obligation to maintain them, replace culverts or provide snowplowing.

Culverts and Bridges:

The road system in Winthrop includes numerous stream crossings. Many of these are small culverts, which are the town's responsibility to maintain by cleaning and inspecting regularly, and replacing them, as necessary.

There are also several bridges. Bridges are usually the responsibility of the state, although when they are replaced on local roads, a portion of the costs must be contributed by the town. A summary of the MDOT bridge inventory follows:

- New Mill Stream Bridge: Route 202 over Mill Stream. MDOT-maintained, culvert-style bridge, 18' long. New culvert put in recently.
- Route 202 railroad bridge: 378' steel girder bridge, maintained by MDOT.
- Bowdoin Street Bridge: Crossing Mill Stream. 24' concrete slab bridge, maintained by MDOT.
- Mill Stream Bridge: Main Street crossing Mill Stream. 20' concrete slab bridge, maintained by MDOT.
- Stanley Bridge: 10' ADS plastic culvert crossing Stanley Pond on Metcalf Road. Owned and maintained by the Town. Good condition.

Transportation Choices:

While the most common form of daily transportation remains motorized vehicles, it is the intent of the Comprehensive Plan to highlight and encourage alternate means of transportation. Some demographics of the population (notably youth and some elderly) cannot use motor vehicles to get around, and the increasing costs and impacts of energy consumption argues for reduced automobile use in the future. While it is doubtful there will be a sizable shift in demand for alternate transportation over the planning period, construction of transportation systems is both expensive and timely, requiring a long-range view.

Railroad:

The CSX-Pan Am rail line runs from Lewiston to Waterville, bisecting Winthrop. The Pan Am system provides freight services and has been seen as a potential draw to business development in Winthrop, though no local businesses currently use the freight service. There are industrial spurs available, but they are unused. Restoration of the long-dormant passenger rail service has been discussed, and Winthrop would be a logical stop, as the town is located halfway between Lewiston and Waterville. However, discussions have not progressed beyond high speculation. Proactively promoting a train stop for passenger-use in Winthrop would be a huge boon for the area. The town should consider discussions and, if possible, collaboration with Pan Am Railways to work toward this objective.

Public Transportation:

Aside from a part-time taxi company, Central Maine Taxi, there are no public transportation services available in Winthrop. The Kennebec Valley Community Action Program (KVCAP) has a demand-response service and volunteer drivers to pick up and deliver people to various locations. There are no regularly scheduled routes or pick-ups.

A variation on public transit is the use of carpooling or vanpooling. These are often informal arrangements or sponsored by large employers. The MDOT runs “GoMaine,” a service matching riders and drivers from one point to another. GoMaine will organize a vanpool if there is sufficient demand, but Winthrop has not demonstrated a need.

With the increased emphasis on renewable energy, rising costs of fossil fuels, and an aging population, an increased demand for public transportation is anticipated. Winthrop should explore options for meeting residents needs in public transportation options, such as providing those resources within the municipality, working with organizations such as Neighbors Driving Neighbors, or exploring the possibility of expanding Central Maine Taxi’s services. Another option is to work toward the re-installation of a bus stop in the downtown area for Greyhound buses. Contact has been made with Greyhound. One roadblock to adding a bus stop is the company wanted a guarantee on a set number of sales for bus tickets before adding a stop in Winthrop.

Bicycle Routes:

Bicycle travel in Winthrop is limited to on-street routes or cross-country trails. Because Winthrop has a downtown area with schools, stores, the beach, and other attractions, there is plenty of demand for in-town cycling, but it has not materialized into projects. Potential opportunities include not only additional bike trails and dedicated lanes on roadways, but also facilities for bike storage at strategic locations. The town should

identify bicycle-friendly destination points and prioritize them for storage facilities. Any significant, new developments near the downtown should be required to provide convenient bicycle and pedestrian access.

Ideally, newly implemented bike routes would connect destinations of particular importance throughout town and the bike corridors would be stand-alone, not just extensions of highway shoulders. Currently, Winthrop's only bike corridor is by the grade school on Highland Avenue.

The area outside of downtown provides opportunities as well. Bicycle touring is a large and growing component of tourism, especially in scenic areas such as Winthrop. However, most of Winthrop's rural roads are narrow and the shoulders are in such poor condition they do not permit safe biking (or walking). Maine's Bicycle Map shows one bicycle tour, labeled the "Capitol Tour," that originates in Augusta, comes into Winthrop from East Monmouth up Route 135, and crosses Route 202 to Metcalf Road, west to downtown Winthrop, then south on Annabessacook Road. Route 202 itself is not part of this route because of the heavy traffic.

A separate Winthrop-to-Kennebec River Rail Trail bicycle trail has been recommended by several local and regional plans. Such a trail could parallel Route 202 or utilize the old trolley bed, utility paths, or snowmobile trails to link the town with Augusta or Hallowell. The concept has the support of Winthrop and Manchester residents, but no concrete action has been taken yet.

In 2011, KVCOG completed the *Winthrop Bicycle-Pedestrian Plan*, based on many public meetings, a survey, and numerous planning studies. This plan includes recommendations, data, and statistics to support constructing and including bicycle and pedestrian paths throughout town and in certain locations outside of town. The plan also identifies roadblocks in pursuing these endeavors.

One roadblock in pursuing the creation and promotion of pedestrian and bicycle paths through town is that current local road design standards do not support the creation of bike lanes.

Sidewalks:

Winthrop has a sidewalk network totaling 4.7 miles in the downtown area, though its physical condition is variable. Sidewalks do not receive the investment that roads do. Some sidewalks along Main Street were rebuilt pursuant to the *Downtown Revitalization Plan*, but there are many gaps in the system that discourage more walkability. Pedestrians are occasionally seen walking in the streets due to the lack of, or poor condition of, sidewalks.

A set of walking paths, including traditional sidewalks, would benefit downtown Winthrop. These paths could connect major destinations, including the schools, recreation areas, Maranacook Lake and Mount Pisgah as suggested for the bike paths. They could also be considered as infrastructure to promote public health.

The current Zoning Ordinance does not include requirements or standards for bicycle or

pedestrian paths. Revision to include these aspects should be given consideration in the future.

Airports:

The Waterville and Augusta airports offer a limited number of commercial flights (passenger service from Augusta only) and provide access for private and corporate planes and small jets. Both airports are a 20- to 30-minute drive from Winthrop. Portland International Jetport and Bangor International Airport offer commercial passenger service to several different hubs, both about an hour away. The Manchester-Boston Regional Airport in New Hampshire offers a popular alternative to Boston's Logan Airport.

There are no public or private airports in Winthrop, except a seaplane base at the northern end of Cobbossee Lake. Augusta State Airport is the nearest airport.

Electronic Vehicles:

With the increased emphasis on Electronic Vehicles (EV), consideration needs to be given to potential future locations for EV charging stations. If they are on town-owned property, such as the Town Office or public parking lots, discussions on the initial installation cost, number and brands of chargers, and other aspects of the charging stations should be scrutinized. Ideally, EV charging stations should be centrally located in the downtown area, so people can walk around and shop while waiting for their vehicle to charge. There are several grants available for their installation that should be considered, as well.

Parking:

While parking is traditionally provided by the entity responsible for generating the demand, downtown areas such as Winthrop's were built-up before motor vehicles existed and have little space available for parking. To support these businesses, someone else must assume responsibility for providing common lots downtown.

The 2000 *Downtown Revitalization Plan* inventoried 86 parking spaces in common lots and on Main Street. Since then, public parking has been added behind 148 Main Street, at the new town office, at the new post office, and across the street from the CM Bailey Public Library. Though the 2000 plan estimated a shortage of 33 parking spaces, since adding the abovementioned public parking, those needs have been met, although the town office lot is not considered within the immediate downtown area.

In the future, if the Commerce Center adds retail space on the first floor, or residential or commercial space on the upper floors, it will create significant demand for new parking in the downtown area. In the Zoning Ordinance, existing parking requirements could limit growth and create additional impervious surfaces.

The Zoning Ordinance conditionally exempts businesses along Main Street from providing parking. This exemption is for existing structures in the village area and is applicable when the "establishment's lot does not contain sufficient area or is not within three hundred (300) feet of sufficient parking area." This is specific to existing buildings and does not pertain to new development. By including this language in the Zoning

Ordinance, Winthrop does not discourage development in the downtown area by having parking standards.

This exemption allows modern use of existing buildings that were likely constructed before parking standards were mandatory. While this exemption does add demand to public parking, it also forces Winthrop's downtown area to be more pedestrian-friendly, as buildings can be easily accessed on foot or by bicycle.

Providing public parking in downtown areas serves multiple purposes, such as promoting and encouraging a walkable downtown and increasing residents' sense of place. The town may want to consider financing additional public parking areas and requiring any new development in the downtown area, or adjacent to the downtown, to construct sidewalks.

Currently, Winthrop has two public parking lots. One is in the village off Main Street, and the other is across from the library. These two public parking lots create roughly 30-35 additional parking spaces within the downtown area.

Parking issues in Winthrop are typically related to seasonal population fluctuations; when there are more out-of-town visitors and tourists, finding parking directly in front of certain locations becomes more challenging. For those who don't mind walking from one of the public parking lots, parking is not an issue.

Certain locations that are prone to parking issues are in and around Norcross Point and around the larger lakes in the summertime. The funeral home on Bowdoin Street in the downtown area is prone to parking issues during large funerals.

Transportation Concerns:

Traffic on Main Street is a local concern because even though volumes are not heavy, the street is characterized by many driveways, on-street parking, and pedestrian crossings. Speeding through town is a more common complaint than congestion.

Winthrop has seen its share of development in the rural areas. While the transportation system is not stressed in these areas, rural development does not result in efficient use of the road system. Rural development requires a larger percentage of road budget per capita for maintenance and overstresses back roads that were not designed for heavy use.

An increasing concern for Winthrop is the lack of public transportation and the growing need for such a service. Winthrop residents would benefit from public transportation between the two commercial districts, the grocery store, the pharmacy, medical offices, service providers, and other retail establishments along Main Street.

Some roads in Winthrop are not in good condition, causing transportation concerns. The town needs to formulate a plan for road maintenance and for future necessary improvements, both logistically and financially. Ideally, the development of a Road Committee should be considered to oversee a maintenance program.

Another transportation concern is the condition of the town's 4.7 miles of sidewalks. The current sidewalks were installed over 30 years ago and since that time, they have received minimal maintenance.

Summary of Analysis:

Overall, Winthrop's network of roads is adequate and has not required the construction of new roads for many years. Now, the challenge is creating and implementing a plan to maintain these roads in the most cost-efficient manner.

Another challenge is maintaining the existing sidewalks, which are predominantly in the downtown area, and creating new ones, where feasible, throughout town to continue to encourage walkability and connectivity.

Also, where feasible, the construction of bike lanes throughout town, or at least connecting certain locations, would be ideal to promote alternative forms of transportation that are becoming an increasing trend.

Speeding in the downtown area is a common concern, as is increased traffic. People are ever more reliant on vehicles, and without public transportation there are few other viable options. This, coupled with sprawl will eventually make travel on Winthrop's rural roads unpleasant.

With increased transportation costs and more commuters to Augusta and other regional destinations, alternate modes of transport will become more attractive and necessary. While buses and rail are an unlikely scenario, ride-sharing programs with park-and-ride lots conveniently located are more realistic.

Winthrop's future considerations for transportation should be in easy access locations for EV chargers, exploring options to address the need for public transportation, and the creation of biking/walking paths throughout town.