

## TRANSPORTATION

### Introduction

This chapter describes the current condition of Union's transportation system and makes recommendations for its maintenance and improvement. The format and outline of this chapter follows the State Comprehensive Plan Review Criteria Rule, as amended on 8/6/2011. [BLANKS IN TEXT --- AND TABLES SHOULD BE FILLED IN BY THE TOWN OR NOTED AS NOT APPLICABLE.]

### A. State Goal

*To plan for, finance and develop an efficient system of [transportation-related] public facilities and services to accommodate anticipated growth and economic development.*

### B. Analyses

1. *What are the transportation system concerns in the community and region? What, if any, plans exist to address these concerns?*

Safety:

Maine DOT records Route 235 from the Warren town line to the intersection with Come Spring Lane as a high crash location where eight or more crashes have been reported within three-year periods. Local concern has been expressed for these road segments/intersections: Route 17 intersections with these roadways: Wottons Mill Rd, Route 131 S (South Union Rd), Route 131 N (Appleton Rd), North Union Rd, Bump Hill Rd and ---.

Route 131 is in fair condition, making driving the posted speed difficult and dangerous. Intersections with inadequate lighting for motorists and pedestrians include ---.

The following improvements would increase safety for motorists and pedestrians:

- Enhance navigation signs, guide signs, and warning signs.
- Adjust street name signs and/or replace with larger signs for better visibility for drivers and for emergency response.
- Access management strategies: Limit curb cuts by consolidating separate entrances that are close together, and regulate requests for new entrances to ensure adequate site distances.

Traffic speed:

Except when conditions or other regulations require a lower speed, the following are maximum rates of speed, unless posted otherwise: 15 m.p.h. in a school zone at specific times of the day, 25 m.p.h. in a business or residential area or built up portion, 35-45 m.p.h. on all other public ways. Speeding is of concern on all roads. Ongoing police enforcement is very costly. The use of traffic calming strategies in road design might decrease the amount of enforcement needed to reduce speeding.

Congestion and travel delay:

The level of service (LOS) is a measure of congestion and delay. The lowest LOS found in Union were C and D for Route 17. Other State roads were B. All town roads were A. Maine DOT no longer provides this data. Generally, roadways in Union have not reached their maximum capacities. Delays where the travel speed is lower than the posted speed are --- limited. Delays on roads do occur during the morning and evening commute and mostly during the summer tourist season.

Travel volume and type:

See the Transportation Map for annual average daily traffic volumes at key points on roadways in Union in 2014. The major roads accessing Union, Route 17, Route 131, and Route 235 have the highest volumes, as listed below:

- Route 17: 6,509 vehicles at the Hope town line, 7,410 vehicles west of Miller Rd, 7,261 vehicles west of Appleton Rd, and 4,783 vehicles at the Washington town line
- Route 131 N (Appleton Rd): 3,114 vehicles north of Route 17, and 1,779 vehicles at the Appleton town line
- Route 131 S (South Union Rd): 1,988 vehicles south of Route 17, and 1,476 vehicles at the Warren town line
- Route 235: 2,153 vehicles south of Common Rd, and 1,640 vehicles at the Warren town line

Seasonal volumes (highest in July and August) are approximately 1.5 times greater than the annual averages for state roadways in the region. Private passenger vehicles comprise most of the volumes on Union roadways. Importantly, nearly all consumer goods for sale in Union are trucked into the Town, and Union businesses depend upon the road network to truck most of their goods out of the Town.

Road and bridge design and maintenance:

The Town is concerned that all roadways and bridges be well engineered and built to last. Substandard design or construction will result in higher costs to taxpayers and/or subdivision associations for repair. Road damage from flooding, adverse weather conditions, which have increased in recent years, and from use, especially heavy trucking activity, requires that roads be built to appropriate standards, including sufficient sub-bases, drainage systems and grading. While this may cost more upfront, in the long term

it will reduce costs for the taxpayers, residents, and business owners, all of whom depend on the road network.

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance often increases faster than the costs of other goods and services, due principally to the costs of petroleum and petroleum-based products like asphalt. The state and federal match for such work has always been important and has become even more crucial to maintain safe roadways. The Town has worked with property owners to improve the safety and mobility (traffic flow at the posted speed) of roadways by ---.

Accessibility:

Outside of the village, Union is accessible primarily by motor vehicles. Parking adequate for current and projected future use is found at schools, recreation, shopping and public gathering areas, with the exception of ---. Municipal parking lot locations and capacity are noted below in C.3. The lots augment the onsite parking provided at shopping and other locations. Current and recommended pedestrian and bicycle routes are noted in below in B.8. and C.2. Concern for improving the safety of these routes has helped shape the recommendations in this chapter. Residents in general, especially children and the elderly should be able to get around portions of the Town without depending on motor vehicles exclusively.

Union and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately-owned vehicles for daily trips to work, stores and elsewhere. Busses bring children to and from public schools. See C.8. for a description of current public transportation services.

Closed or posted bridges or roads:

There are no closed roads or bridges. The following state road has been posted with weight restrictions (23,000-pound limit) seasonally in recent years: Wottons Mill Rd. Locally posted roads include Cole Rd and Davis Rd. Seasonally (spring thaw) all town roads have a 5-ton (10,000-pound) limit.

2. *Are conflicts caused by multiple road uses, such as a major state or U.S. route that passes through the community or its downtown and serves as a local service road as well?*

Union has considerable through traffic on Route 17, which connects Augusta with Rockland. Route 131 connects neighboring communities in Knox and Waldo Counties. Route 235 connects neighboring communities in Lincoln, Knox and Waldo Counties. Common Rd links these major routes and has both local and through traffic. These roads serve local commerce and neighborhoods as well. See the Transportation Map for traffic volumes. Different uses can create conflicts, especially in regards to speed. The enforcement of posted speeds and adequate road design are crucial to counteract these conflicts and the hazards they can create.

3. *To what extent do sidewalks connect residential areas with schools, neighborhood shopping areas, and other daily destinations?*

Union has a sidewalk in the village area (one narrow 20 to 24 inch wide paved path leading for almost one-half mile along the curb of Common Road from the triangular segment of the Common between the library and the bank to a point opposite the western front entrance of the Thompson Community Center) in poor to fair condition. The remainder of the Town does not have sidewalks.

4. *How are walking and bicycling integrated into the community's transportation network (including access to schools, parks, and other community destinations)?*

Pedestrians and bicyclists use roadway shoulders, which are narrow in many places, or use the travel lanes where there are no shoulders. Heavier vehicular volumes in summer and speeding (year-round) threaten the safety of pedestrians and bicyclists, as well as those riding on horseback to and from area farms and stables. The addition of sidewalks or multi-use paths in certain areas as noted in the strategies section of this chapter could improve this situation, but would require spending public funds and the cooperation of private landowners. Off-road trails including hiking paths and snowmobile trails are noted in the Recreation Chapter.

5. *How do state and regional transportation plans relate to your community?*

The 2010-2011 'Connecting Maine' Statewide Long-Range Transportation Plan to 2035 provides overall goals for the maintenance and improvement of the state transportation system to meet the needs of residents and businesses. These goals agree generally with this comprehensive plan. There are no Union specific projects or impacts included in the Long Range Maine DOT plan. The lack of adequate funding to preserve and enhance the state transportation network will continue to affect Union along with many other Maine communities.

Maine DOT has prioritized highway corridor for improvements and maintenance based upon usage and importance in the state roadway network. Union's highest priority roads as ranked by Maine DOT include Route 17, which is ranked as a Priority 2 Road. Regionally, Route 1 is ranked as a Priority 1 Road. In Union, Route 131 N and S is a Priority 4 Road. Route 235, Common Rd, and Wottons Mill Rd are Priority 5 Roads. All other roads in the Union are Priority 6 Roads (town roads). See the Transportation Map for highway corridor priority levels. Statewide, Maine DOT has focused funding on Priority 1 and 2 Roads for improvements.

The Maine DOT Work Plan for Calendar Years 2015-2016-2017 includes these projects for Union.

- Route 17 at Wottons Mill Rd: 2015/16 Highway Safety and Spot Improvements (est. \$27,500): Install flashing beacon (signal) at intersection [022703.00].

- Route 17: 2016/17 Highway Safety and Spot Improvements (\$225,000): Large Culvert 0.21 mile west of Wotton Mill Rd [018565.00]
- Common Rd: 2015 Maintenance (est. \$25,000): Guardrail attachments of Bridge 2971 – Youngs Bridge [WR 30600].
- Route 235: 2015 Maintenance (est. \$45,000): Replace wearing surface of Bridge 3841 - Trues Bridge.
- Multi-town including Union: 2015 Highway Light Capital Paving: Route 131 south of Route 17 (est. \$2,381,000) [022904.00] and Route 131 north of Route 17 (est. \$3,057,100) [022906.00].

The 2009 Midcoast Route 17 Corridor Management Plan includes these communities Hope, Rockland, Rockport, Union and Washington. Recommendations for Union are shown in the next table.

<b>Midcoast Route 17 Corridor Management Plan: Union Recommendations</b>		
<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Access management controls for business entrances strengthened.	Throughout	Safety: maintain posted speed though controlled development/ redevelopment of entrances, encourage shared entrances.
Entrances shared for new and expanded businesses accessing SR 17, with adequate signage alerting drivers to businesses.	Throughout	Safety: fewer new entrances where crashes could occur. Mobility, maintain posted speed. See also, <i>Safety Audit of Existing Traffic Conditions</i> investment description in this table.
Frontage road/internal road/access road, i.e., a new road located parallel to SR 17 for limited stretches, to serve new business entrances.	SR 17 and Sennebec Road and other areas where conditions permit	Safety: reduce multiple access points on SR 17, by providing an access road to abutting business. Development: allow some visibility on SR 17 to remain and open up an area for new development parallel to SR 17 behind existing businesses.
Grade changes, vertical realignment, reduce steepness of SR 17.	SR 17 near Sennebec Road	Safety: poor sight distance.
Intersections: Lane pavement markings and signage.	Throughout	Safety and Mobility: reduce sudden lane changes by clearly marking turn only lanes and through lanes with pavement markings and signs sufficiently ahead of the intersection.

<b>Midcoast Route 17 Corridor Management Plan: Union Recommendations</b>		
<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Intersections: Realignment, vertical, with adequate turning radii for trucks.	SR 17 WB at Clarry Hill Road/ North Union Road, Sennebec Road, and at Pound Hill Road, too steep near SR 17	Safety: improve sight distance based on vertical alignments. Limited sight distance on Route 17 causes increased crash activity on approaches to intersections in the locations noted.
Intersections: Warning signal 'intersection ahead' signs, but not additional full traffic signals.	SR 17 WB at Clarry Hill Road/North Union Road, Sennebec Road, at Pound Hill Road)	Safety: limited sight distance.
Lighting for streets that is context sensitive.	Common Road in the Union Village area	Amenity and Safety: street lights in keeping with the architectural heritage .. would alert drivers to the village areas and the lower speed zones, In Union, the use of solar to reduce costs of lighting. Street lights on SR 17 at intersections with other state routes could improve safety. For both SR 17 and the Common Road, consider the use of LEDs to reduce electricity needed, and motion sensors ahead of lights to activate.
Name for SR 17 should be standardized.	Throughout	Various names for the same roadway is confusing (Augusta Road, Rockland Road, Heald Highway, Rockland St, New Rockland St, Lakeview Dr, Maverick St).
Park and ride parking lots.	Union	Encourage carpooling for commuting to Augusta and Rockland.
Pedestrian trail, bike lanes, sidewalks, walkways, esplanades, and/or shoulder improvements for pedestrian and bike use.	Union village area, SR 17, along Common Road, Depot St, that connects along the river from lower Sennebec Pond, a high crash location, through the proposed commercial SR 17 zones, under the roadway to the Village and near the River and Round Pond to public boat landing and park on SR 235.	Amenity and safety, especially children: encourage growth and livability in Union's village area and to enhance the St. George River and its ponds, currently there is only a very narrow ancient sidewalk for a very short distance from Common Road a few hundred feet down Depot Street (SR 235).

<b>Midcoast Route 17 Corridor Management Plan: Union Recommendations</b>		
<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Public participation in Maine DOT decision making process continued and enhanced	Throughout	Ensure that municipal officials and citizens are aware of transportation options and possible improvements and the project planning and funding process. Seek advice and support of municipal officials, residents and local businesses for suggested improvements.
Public Service Announcements on Television and Radio.	Throughout	Safety: reduce speeding, and tailgating, especially where roadways traverse rolling hills, which obscure intersections, traffic and animals ahead.
Safety Audit of Existing Traffic Conditions.	Throughout	Conduct a safety audit with municipal officials, residents and business owners, along with transportation planners and engineers to better quantify the specific safety improvements that would be most beneficial to implement.
Speed Limit Enforcement.	Throughout, especially in village areas and approaches to those village areas	Safety: vehicular and pedestrian, with attention to commercial vehicles.
Vegetation trimming at high volume entrances and at intersections, no use of pesticides/herbicides that would generate non-point source pollution.	SR 17 near SR 235/Wottons Mill Road	Safety: as vegetation near intersection reduces sight distances for drivers turning onto and off of SR 17 and other roads.
Warning signs for high crash stretches of roadway ahead, hills, hidden driveways.	SR 17, SR 131, Town Roads)	Safety: as rolling hills (changes in vertical alignment of roadways limit sight distances and reaction times).

6. *What is the community's current and approximate future budget for road maintenance and improvement?*

The Urban-Rural Initiative Program/Local Road Assistance Program payments for fiscal years 2010 through 2013 was \$57,960. For fiscal year 2014, it was \$56,424. For fiscal year 2015, the amount will be \$51,748.

Future municipal funding for road improvement and maintenance for Union are estimated at \$400,000 for 2015 through 2020 (from a \$1 million bond approved in 2015).

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance increases much faster than the costs of other goods and services, due principally to the expense of petroleum and petroleum-based products like asphalt. The state and federal match for roadwork has always been important and has become even more crucial to maintain safe roadways. The Town is currently using preservation methods to extend pavement life.

7. *Are there parking issues in the community? If so what are they?*

Parking is generally sufficient in most parts of the Town, with the exception of the Village Common area. During seasonal events like the Union Fair, parking is limited, requiring the transport of people from satellite parking lots. Limited parking at Ayers Park leads to overcrowding during events there. A parking committee had been formed to improve parking availability. Its recommendations included ---.

8. *If there are parking standards, do they discourage development in village or downtown areas?*

Parking standards in the Land Use Ordinance do not generally push development out of the village area. In fact, the Land Use Ordinance allows the Planning Board to exempt the strict application of the off-street parking requirements for properties within the village area.

9. *Do available transit services meet the current and foreseeable needs of community residents? If transit services are not adequate, how will the community address the needs?*

Union and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately owned vehicles for daily trips to work, stores and elsewhere. Busses bring children to and from public schools. See C.8. for a description of current public transportation services.

10. *If the community hosts a transportation terminal, such as an airport, passenger rail station, or ferry terminal, how does it connect to other transportation modes (e.g. automobile, pedestrian, bicycle, transit)?*

Union does not host a transportation terminal.

11. *If the community hosts or abuts any public airports, what coordination has been undertaken to ensure that required airspace is protected now and in the future? How does the community coordinate with the owner(s) of private airports?*

There are no airports within Union. The Knox County Airport is about 20 miles from Union, so development within Union would not interfere with that airport's operations or airspace.

12. *If you are a coastal community are land-side or water-side transportation facilities needed? How will the community address these needs?*

Union is not a coastal community. However, the following improvements are needed to public landings on these waterbodies: Sennebec Pond. Seven-Tree Pond had a ramp upgrade/replacement recently. No public access is available on Crawford Pond. See the Water Resources Chapter and Recreation Chapter for more information.

13. *Does the community have local access management or traffic permitting measures in place?*

Union has Access Management Standards in the Land Use Ordinance (Section 1.10.9) including a permit requirement for driveways and entrances on municipal roadways that takes into account minimum sight distances based upon posted speeds, and among other standards, driveway/entrance spacing requirements.

The Union Subdivision Ordinance states, “When lots do have frontages on two or more roads, the Plan and deed restrictions shall indicate vehicular access shall be located only on the less traveled way.” Additionally, “Where a major subdivision abuts or contains an existing or proposed arterial street, no residential lot may have vehicular access directly on to the arterial street.”

State access management rules apply to state and state aid roads. Those wanting a new curb cut (driveway or entrance access) on a state road have to obtain a permit from Maine DOT. The Town believes that these have been helpful in certain areas like Route 17: Union Farm Equipment/Hammond Tractor Co. area and ineffective in certain areas like Route 17: Come Spring Cafe, due principally to the configuration of the parking area.

14. *Do the local road design standards support the community’s desired land use pattern?*

The Union Subdivision Ordinance has street design standards, with differentiation based upon street classification (Arterial, Collector, Minor, and Private). This allows subdivision design to fit more appropriately into the surrounding land use patterns and scale of development. Additionally, cluster subdivision standards allow for the use of shorter road lengths.

15. *Do the local road design standards support bicycle and pedestrian transportation?*

Opportunities for safe biking and walking along roads are limited. The Site Plan Review provisions in the Land Use Ordinance require that submitted development plans include the, “Location and dimensions of on-site pedestrian and vehicular access ways, parking areas, loading and unloading facilities, design of ingress and egress of vehicles to and

from the site onto public streets, and curb and sidewalk lines...”

The Subdivision Ordinance has sidewalk design standards and states, “The Board may require the creation of a twenty (20) foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street.”

The Access Management Standards of the Land Use Ordinance state, “Adjacent commercial or office properties classified as major traffic generators (e.g., school, shopping center, or office park), shall provide a cross access for vehicles and pedestrians to allow circulation between sites unless environmental constraints are present.”

16. *Do planned or recently built subdivision roads (residential or commercial) simply dead-end or do they allow for expansion to adjacent land and encourage the creation of a network of local streets? Where dead-ends are unavoidable, are mechanisms in place to encourage shorter dead-ends resulting in compact and efficient subdivision designs?*

Since 2001, there have been three new short subdivision dead-end roads built (Harding Ln, West View Ln, and an unnamed road), nine lots in total, which were designed based upon site conditions and surrounding patterns of development. No cluster developments were constructed during this period.

The Subdivision Ordinance allows the Planning Board to require easements in line with the terminus of a dead-end street to provide for a continuation of the road where future subdivision is possible. The Subdivision Ordinance also allows for cluster developments with shorter subdivision roads and compact design possible.

### **C. Conditions and Trends**

*Minimum data required to address state goals:*

1. *The community’s Comprehensive Planning Transportation Data Set prepared and provided to the community by the Department of Transportation, and the Office, or their designees.*

Note: This data set has been incorporated and updated in the Transportation Map.

2. *Location and overall condition of roads, bridges, sidewalks, and bicycle facilities, including any identified deficiencies or concerns.*

The Transportation Network Map shows the locations of roads and bridges. Town road deficiencies include Barrett Hill Rd, Carroll Rd, Collinstown Rd, Miller Rd. Bridge deficiencies include the North Union Bridge #5589. Limited sidewalks are located along these streets within the village: Common Rd. Pedestrian improvements to address safety concerns are in the implementation strategies sections. According to Maine DOT, Union has 62.29 miles of public roads, of which 43.71 miles are town roads, 11.63 miles are

State Aid Highways, and are 6.95 miles State Highways. About 85% of the town roads are paved. Named private subdivision roads and lanes (often shared driveways listed with E-911) are also shown in the table below. The State and town roads are vitally important as they allow residents to commute to work, school, stores, and around the town. The overall condition (poor, fair, good, or excellent) of each road way is noted.

<b>Union Roadway Inventory</b>						
Roadway Name	Classification	Length (Miles)	Owned	Maintained	Surface	Overall Condition
<b>Route 17:</b> Heald Highway	Arterial	6.95	State	State	Paved	Good
<b>Route 131:</b> (Appleton Rd) (South Union Rd)	Collector	2.88 2.29	State	State	Paved	Fair/Good
<b>Route 235:</b> (Buzzell Hill Rd) (Depot St) (Town House Rd)	Collector	0.55 2.55 0.36	State	State	Paved	Good
Abijah Ln	Private	0.14	Private	Private	Gravel	*
Al-Berta Ln	Private	0.56	Private	Private	Gravel	*
Autumn Ln	Private	0.14	Private	Private	Gravel	*
Ayer Hill	Local	0.34	Town	Town	Paved	Fair
Barker Ln	Private	0.08	Private	Private	Gravel	*
Barrett Hill Rd	Local	2.40	Town	Town	Pave/Grav.	Poor
Beech Ln	Private	0.12	Private	Private	Gravel	*
Beote Rd	Local	0.35	Town	Town	Gravel	Fair
Bird Farm Ln	Private	0.77	Private	Private	Gravel	*
Bonnie Ln	Private	0.09	Private	Private	Gravel	*
Bowen Ln	Private	0.19	Private	Private	Gravel	*
Brooks Rd	Local	0.18	Town	Town	Paved	Good
Browns Ln	Local	0.10	Town	Town	Paved	Good
Buckeye Ln	Private	0.56	Private	Private	Gravel	*
Bump Hill Rd	Local	1.83	Town	Town	Pave/Grav.	Excellent
Burkett Rd	Local	0.02	Town	Town	Paved	Good
Butler Rd	Local	2.78	Town	Town	Pave/Grav.	Good
Carroll Rd	Local	1.06	Town	Town	Paved	Fair
Chadam Ln	Private	0.18	Private	Private	Gravel	*
Chestnut Ln	Private	0.06	Private	Private	Gravel	*
Clark Ln	Private	0.08	Private	Private	Gravel	*
Clarry Hill Ln	Local	1.67	Town	Town	Pave/Grav.	Good
Clarry Hill Rd	Local	2.82	Town	Town	Paved	Excellent
Coggins Hill Rd	Local	1.10	Town	Town	Gravel	Fair
Colby Lane	Private	0.09	Private	Private	Gravel	*
Cole Rd	Local	0.59	Town	Town	Gravel	Good

<b>Union Roadway Inventory</b>						
<b>Roadway Name</b>	<b>Classification</b>	<b>Length (Miles)</b>	<b>Owned</b>	<b>Maintained</b>	<b>Surface</b>	<b>Overall Condition</b>
Collinstown Rd	Local	0.90	Town	Town	Paved	Fair
Come Spring Ln	Local	0.60	Town	Town	Gravel	Fair
Common Rd	Collector	1.16	State	State	Paved	Fair
Cove Ln	Private	0.08	Private	Private	Gravel	*
Crawfordsburn Ln	Private	0.60	Private	Private	Gravel	*
Cross Ln	Private	0.06	Private	Private	Gravel	*
Cummings Ln	Private	0.28	Private	Private	Gravel	*
Daniels Rd	Local	0.91	Town	Town	Paved	Good
Davis Rd	Local	1.36	Town	Town	Paved	Excellent
Dewmar Ln	Private	0.23	Private	Private	Gravel	*
Elston Ln	Private	0.05	Private	Private	Gravel	*
Fairgrounds Ln	Local	0.14	Town	Town	Paved	Fair
Feyler Rd	Public Ease.	0.44	Private	Private	Gravel	*
Graybrook Ln	Private	0.11	Private	Private	Gravel	*
Greene Ln	Private	0.13	Private	Private	Gravel	*
Guinea Ridge Rd	Local	0.33	Town	Town	Paved	Good
Hannan Rd	Private	0.54	Private	Private	Gravel	*
Happy Hollow Rd	Local	0.75	Town	Town	Gravel	Good
Harding Ln	Private		Private	Private		*
Hawes Ln	Private	0.35	Private	Private	Gravel	*
Hemlock Ln	Private	0.13	Private	Private	Gravel	*
Hidden Acres	Private	0.74	Private	Private	Gravel	*
Hills Point	Private	0.31	Private	Private	Gravel	*
Hilt Ln	Private	0.62	Private	Private	Gravel	*
Indian Knoll Ln	Private	0.13	Private	Private	Gravel	*
Jasmine Ln	Private	0.07	Private	Private	Gravel	*
Lermond Ln	Private	0.02	Private	Private	Gravel	*
Limestone Pl	Private	0.04	Private	Private	Paved	*
Lynwood Ln	Private	0.23	Private	Private	Gravel	*
Maple Ln	Private	0.06	Private	Private	Gravel	*
Marrs Hill Rd	Local	0.27	Town	Town	Paved	Good
McDonald Ln	Private	0.06	Private	Private	Gravel	*
Meadowood Ln	Private	0.62	Private	Private	Gravel	*
Medomak Ln	Private	0.07	Private	Private	Gravel	*
Mic Mac Ln	Private	0.58	Private	Private	Gravel	*
Middle Rd	Local	1.35	Town	Town	Paved	Good
Mid-State Ln	Private	0.06	Private	Private	Gravel	*
Military Ln	Private	0.62	Private	Private	Gravel	*
Millay Ln	Public Ease.	0.66	Private	Private	Gravel	*
Miller Rd	Local	1.49	Town	Town	Pave/Grav.	Fair

<b>Union Roadway Inventory</b>						
Roadway Name	Classification	Length (Miles)	Owned	Maintained	Surface	Overall Condition
Mt Pleasant Rd	Local	1.72	Town	Town	Paved	Good
North Union Rd	Local	6.26	Town	Town	Paved	Good
Noyes Ln	Local	0.02	Town	Town	Paved	Fair
Oak Point Ln	Private	0.23	Private	Private	Gravel	*
Olson Farm Ln	Private	0.27	Private	Private	Gravel	*
Orchard Ln	Private	0.07	Private	Private	Gravel	*
Overlock Hill Rd	Local	1.94	Town	Town	Pave/Grav.	Good
Payson Rd	Local	1.77	Town	Town	Paved	Good
Pound Hill Rd	Local	0.68	Town	Town	Paved	Good
Quiggle Rd	Local	0.24	Town	Town	Paved	Good
Rabbit Farm Rd	Local	0.51	Town	Town	Gravel	Fair
Rhodes Ln	Private	0.42	Private	Private	Gravel	*
Robbins Rd	Local	0.24	Town	Town	Gravel	Good
Saima Ln	Private	0.15	Private	Private	Gravel	*
Seiders Hill Ln	Public Ease.	0.27	Private	Private	Gravel	*
Sennebec Rd	Collector	2.33	Town	Town	Paved	Good
Seven Tree Ln	Private	0.03	Private	Private	Gravel	*
Shepard Hill Rd	Local	2.31	Town	Town	Paved	Good
Short St	Local	0.10	Town	Town	Paved	Good
Sidelinger Rd	Local	0.97	Town	Town	Gravel	Fair
Skidmore Rd	Local	1.54	Town	Town	Paved	Fair
Springer Ln	Private	0.55	Private	Private	Gravel	*
Spruce Ln	Private	0.12	Private	Private	Gravel	*
Sterlingtown Ln	Local	0.18	Town	Town	Paved	Good
Stickney Ln	Private	0.34	Private	Private	Gravel	*
Stone Rd	Public Ease.	1.44	Private	Private	Gravel	*
Summer Ln	Private	0.20	Private	Private	Gravel	*
Sunk Haze	Local	0.13	Town	Town	Paved	Good
Taylor Ln	Private	0.25	Private	Private	Gravel	*
The Woods Rd	Private	0.25	Private	Private	Paved	*
Thurston Ln	Local	0.11	Town	Town	Paved	Good
Townsend Ln	Local	0.18	Town	Town	Gravel	Fair
Tri-State Blvd	Private	0.11	Private	Private	Gravel	*
Upham Rd	Local	0.26	Town	Town	Gravel	Fair
Winterberry Ln	Private	0.04	Private	Private	Gravel	*
Witch Mountain Ln	Private	0.11	Private	Private	Gravel	*
West View Ln	Private		Private	Private		*
Wood Lily Ln	Private	0.20	Private	Private	Gravel	*
Wottons Mill Rd	Collector	1.86	State	State	Paved	Good

Source: Town of Union, Note: \*The condition of private roads is undetermined.

Union’s public bridges are shown in the next table and on the Transportation Map.

<b>Union Bridge Inventory</b>						
Name	DOT Inv #	Road	Owned	Built	Length (feet)	Federal Sufficiency Rating
Bessey	2069	Common Rd	State	1936	129	94
Fairgrounds	6134	Fairgrounds Rd	State	Replaced 2003/4	64	68.8
Graveyard	0586	Miller Rd	Municipal	1945	18	66
Miller	0587	Miller Rd	State	1999	21	100
North Union	5589	North Union Rd	Municipal	1960	18	97.9
Luce *	6047	North Union Rd	Municipal	1966	17	87.9
Youngs	2971	Old Route 17	State	1917	16	67.8
East Union	2259	Payson Rd	Municipal	1929	25	66
Messer	0572	Route 131	State	1935	13	58.2
Stuart Brook	5665	Route 131	State	2004	16	99.7
South Union	5763	Route 131	State	1959	53	76.7
Medomak*	2541	Route 17	State	1931	53	97.6
St. George river	5893	Route 17	State	1960	180	79.9
Trues	3841	Route 235	State	1947	70	65.4
Lermond Mills	5942	Route 235	State	1963	17	88.4
Upper Medomak*	6046	Shepard Hill Rd	State	1966	26	98.8
Skidmore*	0578	Skidmore Rd	State	2001	66	94

Source: Maine DOT 2013, bridge inspections in 2012

Note: \*Shared with the Town of Washington

3.     *Identify potential on and off-road connections that would provide bicycle and pedestrian connections to neighborhoods, schools, waterfronts and other activity centers.*

A potential off-road hiking trail has been considered from the Elementary School to the Thompson Community Center, and continuing to the Union Fairgrounds. See also, the Recreation Chapter for trails including snowmobile trails.

4.     *Identify major traffic (including pedestrian) generators, such as schools, large businesses, public gathering areas/activities, etc. and related hours of their operations.*

<b>Major Traffic Generators</b>	<b>Hours of Operation</b>
Union Elementary School (Route 17) RSU Administrative Offices Rivers Alternative Middle School	School year (8-4)
Union Fairgrounds	Seasonally
Thompson Community Center	Weekends

Ayers Park	Seasonally
ADD AS APPROPRIATE	

Major Events/Activities	Dates
Farmers Market	Weekly
Founders Day	July
Union Fair (Union Fairgrounds)	Late August
ADD AS APPROPRIATE	

5. *Identify policies and standards for the design, construction and maintenance of public and private roads.*

The Union Subdivision Ordinance has road design and construction standards in Section 11 (Subsections: B and C). As noted above, design standards are differentiated by road classification, which allows for development suited to its surrounding conditions. The Subdivision Ordinance states, “All proposed subdivisions shall be in conformity with the Comprehensive Plan or policy statement of the municipality and with the provisions of all pertinent State and local codes and ordinances.” Additionally, this ordinance states “Where the subdivision streets are to remain private roads, the following words shall appear on the recorded plan: All roads in this subdivision shall remain private roads to be maintained by the developer or the lot owners and shall not be accepted or maintained by the town.” Since 2001, there have been no private subdivision roads accepted as public roads through town meeting vote.

6. *List and locate municipal parking areas including capacity, and usage.*

Municipal Parking Lots Name/Location	Spaces	Condition	Usage
Town Office/Fire Station	36	Good	Regularly
Union Common	64	Fair	Frequently
ADD AS APPROPRIATE			

7. *Identify airports within or adjacent to the community and describe applicable airport zoning and airspace protection ordinances your community has in place.*

There are no airports within Union. The Knox County Airport is about 20 miles from Union, so development within Union would not interfere with that airport’s operations or airspace. The Wireless Telecommunication Facility Provisions in the Land Use Ordinance regulate the height of cell towers (190-foot maximum).

8. *Identify bus or van services.*

Coastal Trans, Inc. (CTI) is a non-profit subsidiary of Methodist Conference Home, Inc. CTI is a State of Maine designated Regional Transportation Provider. CTI operates transportation services for residents of Knox, Lincoln, and Sagadahoc Counties and the

Towns of Brunswick and Harpswell. CTI provides Non-Emergency Medical Transportation for MaineCare eligible riders, as well as services for riders who are elderly, have disabilities, and people with low income and transportation for the public. They currently work with a number of agencies to provide connections to services for mental health, medical care, and adult rehabilitation services. CTI operates a fleet of agency vehicles that include ADA accessible buses, as well as sedans and vans to provide transportation services. They operate Demand-Response services for riders, and a Midcoast Shuttle that provides round-trip morning and afternoon service from Brunswick to Edgecomb.

Concord Coach (Trailways) offers daily service on their Maine Coastal Route between Orono and Boston's Logan Airport. Stops include the University of Maine in Orono, Bangor, Searsport, Belfast, Lincolnville, Camden/Rockport, Rockland, Waldoboro, Damariscotta, Wiscasset, Bath, Bowdoin College, Brunswick, and Portland. Waldoboro is the closest stop to Union.

The frequency of scheduled bus service is insufficient for most individuals to be able to use on a regular basis, as would be necessary for commuting to work daily. The dispersed location of residents and of workplaces inhibits public transportation to some extent. There are, however, key locations within Union, and in other communities, that could benefit from more frequent bus services. These areas include the village. Strategies to address this need are presented at the end of this chapter.

9. *Identify existing and proposed marine and rail terminals within your community including potential expansions.*

The Town has no marine or rail terminals. None are proposed.

10. *If coastal communities identify public ferry service and private boat transportation support facilities (may be covered under Marine Resources with cross reference) including related water-side (docks/piers/wharves) and land-side (parking) facilities.*

Union is not a coastal community.

**Policies**

1. *To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.*
2. *To safely and efficiently preserve or improve the transportation system.*
3. *To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.*
4. *To meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users (motor vehicles, pedestrians, bicyclists).*
5. *To promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.*

**Strategies**

Note: Text in blue is supplemental, meant to support the required strategies provided by the State (italicized).

<b>Transportation: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
1. <i>Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network.</i>	Selectmen, and Town Manager	Immediate and Ongoing
2. <i>Initiate or actively participate in regional and state transportation and land use planning efforts.</i>	Selectmen, and Town Manager	Long Term
3. <i>Enact or amend local ordinances as appropriate to address or avoid conflicts with:</i> a) <i>Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A.73)</i> b) <i>State access management regulations pursuant to 23 M.R.S.A. 704: To maintain and improve traffic flows, and improve safety, future land use ordinance provisions should be in harmony with access management performance standards set in current state regulations for state and state aid roadways.</i> c) <i>State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. 704-A.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
4. <i>Enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm

<b>Transportation: Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
5. Consider the effects of increased intensity and frequency of storms and flooding, and propose amendments to roadway design standards including adequate sizing for culverts and drainage to reduce the potential for future damage to roadways. Seek state and federal grants to replace substandard culverts and to improve roadway drainage.	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
6. Work with the Maine DOT as appropriate to address deficiencies in the system or conflicts between local, regional, and state priorities for the local transportation system.	Selectmen, and Town Manager	Immediate and Ongoing
7. Transit Options: Work with Penquis CAP and other providers to meet the needs of youth, elderly and disabled residents, who lack their own transportation, by providing carpools, van/jitney, to stores, employers, and services.	Selectmen, and Town Manager	Long Term
8. Pedestrians and Bicycles: To promote pedestrian and bicycle safe options, the Town will welcome opportunities to create multi-use, walking and bicycle paths throughout the Town and especial into interior areas, and sidewalks in the village and other areas. Through public participation the Town will prioritize potential projects, and then seek CDBG infrastructure funds, Maine DOT Enhancement funds, and other sources, to create new paths where best suited, and in agreement with landowners. Public support for these project proposals will be obtained before the Town commits resources.	Selectmen, Town Manager, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm and Ongoing
9. Parking: Provide additional funding to improve parking facilities and seek additional parking in the Union Common, and a Park-and-Ride Lot abutting or near Route 17.	Selectmen and Town Meeting Vote	Long Term
10. Impact Fee: Investigate, and implement if warranted, an impact fee system that applies to all new development that affects traffic use of the Town's major road corridors to assist in providing funds to upgrade these roads.	Selectmen and Town Meeting Vote	Long Term
11. Site Specific Signage: <ul style="list-style-type: none"> <li>• Study the effectiveness/safety of the Yield sign at Route 131 (South Union Rd) and Route 17 intersection.</li> </ul>	Selectmen, Town Manager, Maine DOT	Midterm

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.