Transportation

Introduction: Ogunquit's Roadway Network

The Town of Ogunquit's roadway system ranges from rural country roads, to the US Route 1 corridor, to the six-lane Maine Turnpike (I-95), which serves as Maine's gateway from the Boston metropolitan area and the eastern United States. Both the Maine Turnpike and U.S. Route 1 are heavily traveled, especially during the ten-week summer tourist season from late June through Labor Day.

A total of 22.7 miles of public roads lie within Ogunquit. According to data from MaineDOT, there are 2.6 miles of Interstate Highway, 2.3 miles of State Highway, 1.3 miles of State Aid Highway, and 16.5 miles of local roads; the meaning of each of these road designations will be explained within this document, along with data on road condition, bridges, a breakdown of different types of road users (also known as "modal split"), the regulatory framework for review of transportation impacts associated with land development in the Town, and transportation-related Town policies.



Source: MaineDOT

Community Survey Results

- PLACEHOLDER

Roadway Network and Classifications

Ogunquit's transportation network consists of approximately 22.7 miles of public roadways, including US Route 1, the community's primary thoroughfare. The majority of Ogunquit's roads are local roads,

providing access to state highways and service roads for adjacent property owners that accommodate little or no through traffic.

This section provides detailed information on the Town's roadway network. It includes a description of the classification systems that determine maintenance and construction responsibilities, as well as funding eligibility.

State Classification

In the early 1980s, the Maine Legislature authorized and directed MaineDOT to classify all public roads, which are referred to as *highways* by state and federal terminology, throughout the State. The basis of this classification system was that roads serving primarily regional or statewide needs should be the State's responsibility and roads serving primarily local needs should be of municipal responsibility.

The State's classification system includes the following:

- <u>State Highways</u> form a system of connected routes throughout the state that primarily serve intra- and interstate traffic. The State is responsible for all construction/reconstruction and maintenance on the 2.3 miles of arterial highway (Route 1) in Ogunquit.
- <u>State Aid Highways</u> connect local roads to the State Highway System and generally serve intracounty rather than intrastate traffic movement. State aid roads are usually maintained by MaineDOT in the summer and by the municipalities in the winter pursuant to <u>State Law 23</u> <u>MRSA 1003</u>. The State Aid Highway category generally corresponds with the federal 'collector' classification. Shore Road is the only State Aid Highway and is approximately 1.3 miles long.
- <u>Town ways</u> are all other highways not included in the State Highway or State Aid Highway classifications that are maintained by municipalities or counties. These roads are classified as federal 'local' roads. There are approximately 16.4 miles of local roads in Ogunquit.

Federal Functional Classification

In addition to the State classification system, there is the Federal Functional Classification system. The federal system complements the State's system and is based on the type of service that is intended to be provided by the roadway. The federal classifications relate to traffic capacity and volume attributed to the roads and are divided into rural and urban systems. While state classification designates maintenance jurisdiction, federal functional classification creates a hierarchy of roads and determines which roads are eligible for Federal highway funds. Functional classifications are reviewed after each census and updates are made to ensure classifications are in line with road functions.

There are four functional classes represented in Ogunquit as described below:

- Minor Arterials link and support the principal arterial system. Minor arterials are roads that
 place a greater emphasis on land access than the principal arterial and therefore offer a lower
 level of mobility. They serve as links between larger and smaller towns or as connections
 between collectors and the primary arterials. In Ogunquit, Route 1 is the only Minor Arterial and
 therefore eligible for federal aid.
- Major Collectors differ from arterial roadways due to size and general service area. Collectors serve traffic in a specific area, whereas arterials generally serve traffic moving through an area.
 Thus, average trip lengths on collectors are shorter than trips on arterials. Furthermore,

- collectors gather traffic from local roads and streets and distribute them to the arterial. Major collectors are eligible for federal aid and include Shore Road in Ogunquit.
- <u>Local Roads</u> serve primarily to provide access to residential areas. They are designed for low-speed travel and to carry low volumes of traffic relatively short distances. Local roads are generally not eligible for federal aid funding for improvements or maintenance.

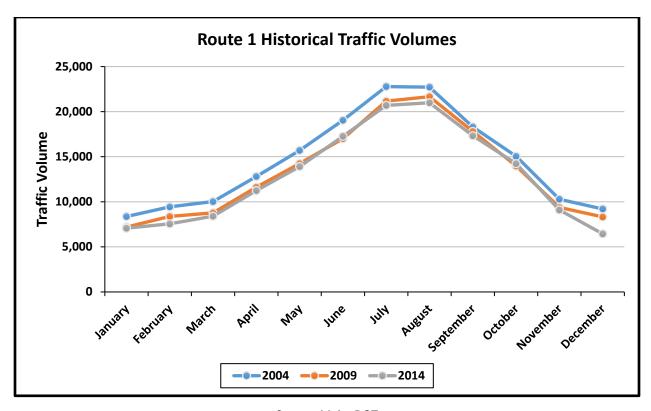
Traffic Volumes

MaineDOT monitors 71 permanent traffic recorder sites across the state, monitoring traffic volumes 365 days per year on an hourly basis. Maine DOT also monitors thousands of short duration count locations throughout Maine, including 35 locations in Ogunquit, typically collected on a three-year rotating schedule. The data from the short duration counts are adjusted using the states permanent counter data to develop Average Annual Daily Traffic (AADT) volumes. The data below displays AADT data from 9 locations in Ogunquit not including Route 1.

				2007	-2013	2013	-2019
Traffic Counts Locations: 2007, 2013, 2019	2007	2013	2019	Change	Percent	Change	Percent
Berwick Road west of US 1	2,250	1,880	2,290	-	-	410	21.80%
Berwick Road at Maine Turnpike / York							
Townline	1,010	810	1,080	-200	19.80%	270	33.33%
Agamenticus Road at York Townline	920	650	800	-270	-	150	23.08%
Shore Road at York Townline	2,310	1,700	1,900	-610	26.41%	200	11.76%
Shore Road southeast of Bourne Lane	5,600	4,840	4,910	-760	13.57%	70	1.45%
Shore Road northwest of Obeds Lane	6,420	5,110	ı	-1,310	20.40%	-	-
Beach Street east of River Road @ Bridge 3492	2,680	2,620	1	-60	-2.24%	-	-
Perkins Cove Road southeast of Shore Road	4,260	2,630	2,650	-1,630	38.26%	20	0.76%
Captain Thomas Road west of Route US 1	1,090	890	1070	-200	18.35%	180	20.22%

Source: MaineDOT

Until 2014, MaineDOT was collecting traffic data on U.S. Route 1 with a permanent traffic recorder, located just north of the intersection with Captain Thomas Road. Traffic volume trends from this location are shown in the table below. Not surprisingly, the months of July and August experienced the most traffic along U.S. 1 in Ogunquit. Between 2004-2009, the traffic volume decreased, with all months experiencing at least a 2.8% reduction. Between 2009-2014, the traffic volume still decreased, but less significantly. These decreases are most likely a result of the economic downturn that began in 2008.



Source: MaineDOT

Motorists using Route 1 as an alternative to I-95 contribute to the congestion in the downtown area during the peak summer months. Despite the presence of many public and private beach parking lots, they fill to capacity quickly on summer days, causing traffic to back up on connecting roadways. In 2018 a permanent traffic counter was installed along Route 1 at the Wells town line. MaineDOT has published data for 2018, 2019, and 2021, which is displayed below. 2020 data was omitted due to the reduction of traffic as a result of the stay-at-home orders associated with the Covid-19 pandemic. Monitoring this location, and the associated detailed data, into the future can help with determining traffic growth rates and seasonal fluctuations.

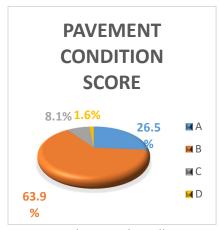
US Route 1 (Bridge over Ogunquit River) at Wells town line					
Year	2018	2019	2020	2021	
AADT	12,460	13,140	NA	13,530	
Source: MaineDOT					

Source: MaineDOT

Pavement Conditions

As part of MaineDOT's asset management methodology, pavement condition data is collected every two years on all State Highways and State Aid Highways. MaineDOT uses the Pavement Condition Rating (PCR), a 0-5 scale that is composed of International Roughness Index, rutting, and two basic types of cracking. The A-F scale (A being great condition) varies by Highway Corridor Priority.

As of 2022, less than 10% of Ogunquit's State maintained roads fall into the C and D categories, with no segments of road falling into the F category. As seen in the chart below, over 90% of town roads are in good and great condition (A or B) which is well above the statewide percentage. Although this data changes as sections of roads deteriorate and receive new pavement, it gives a general idea of the condition of state roads in Ogunquit and provides a benchmark for customer service level.



Maine Local Roads Center offers a Road Surface Management Software (RSMS) that can be used to assess and prioritize local roads for improvements, including cost estimates used for developing a local road maintenance plan. RSMS can also help Ogunquit develop road condition scores on local roads, similar to the MaineDOT practices.

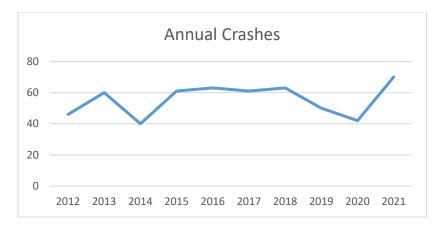
Road conditions in Ogunquit vary depending on the original construction road, recent maintenance and preservation, traffic volumes and type, and geographical conditions which includes stormwater drainage. Ogunquit street design and construction standards allow the town to control how new roads are

constructed. Maine law allows towns to post roads to limit heavy truck traffic, which is known to cause much more damage to a road than normal vehicular traffic. The purpose of this restriction typically is to prevent as much damage as possible to the roadways while they are thawing and in a vulnerable state. As the season shifts toward spring, and the temperatures rise, the melting snow and ice saturates the ground under the roads, and this weakens the base that the asphalt is laid upon. This weakened base cannot support the stress of heavy loads and can result in costly and avoidable road damage.

Crash History & Trends

MaineDOT has a system that it uses to rate crash locations throughout the state called *High Crash Locations (HCLs)*. HCLs are given greater attention for funding projects by MaineDOT for their safety programs. In order to qualify, HCLs must be at locations that have had at least eight crashes in a three-year period. It also must exceed the Critical Rate Factor (CRF) of 1 or greater. A CRF is the average expected rate of crashes for a location (based on statewide data of similar crashes). HCLs are updated on an annual basis using the previous three years of crash data.

In Ogunquit, there are several road segments and intersections along Route 1 that have historically been identified as high crash locations; however, there have not been any HCLs located in Ogunquit since 2019. The three most recent HCL locations in Ogunquit were the intersection of Main Street (Route 1), Beach Street and Shore Road, as well as the segments of Route 1 from School Street to Shore Road and from Glen Avenue to Grasshopper Lane. Overall, the total number crashes in Ogunquit trended down in 2019 and 2020 before hitting a record high of 70 crashes in 2021. Safety improvement projects along with reduced traffic & tourism as a result of the Covid-19 pandemic may have contributed to the low in 2020 while the high crash number in 2021 may reflect an increase in visitors returning in 2021. The table below indicates that there were 556 crashes in Ogunquit between 2012 and 2021.



Source: MaineDOT

Bridges

MaineDOT defines bridges as structures designed to convey traffic over a body of water or other obstruction with a span length equal to or greater than twenty feet. There are nine bridges in Ogunquit. Three of them are owned and maintained by the Maine Turnpike Authority and the remaining six bridges are owned and maintained by MaineDOT.

Bridge condition is monitored every two years and given a Federal Sufficiency Rating (FSR). Each FSR has a numeric indicator of the overall value of the sufficiency of the bridge. A rating between 0-100 is given to each bridge (0 indicates the worse and 100 indicates the best). This rating gives an overall value of the sufficiency of the bridge. Since functional obsolescence (too narrow or low weight capacity) may account for a large portion of the rating, one should not assume that a low sufficiency rating means the bridge could fail.

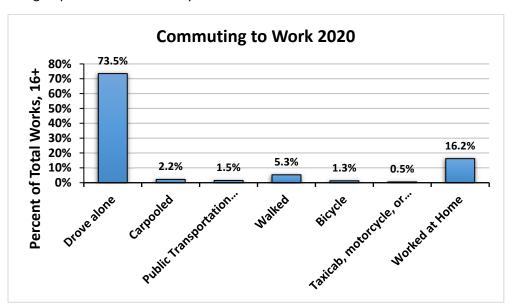
Bridges in Ogunquit				
Bridge Name	Bridge Number	Owner / Maintainer	Federal Sufficiency Rating	
Ogunquit River Bridge	1317	Maine Turnpike Authority	68.6	
Captain Thomas Road	1316	Maine Turnpike Authority	99	
North Berwick Road	1315	Maine Turnpike Authority	96.8	
Wears	3759	MaineDOT	87.5	
Ogunquit Beach	3492	MaineDOT	71	
Phillips	2663	MaineDOT	63	

Donnells	2239	MaineDOT	66
Dickens Hill	1252	MaineDOT	87.3
Sherburne	6122	MaineDOT	96

Source: MaineDOT

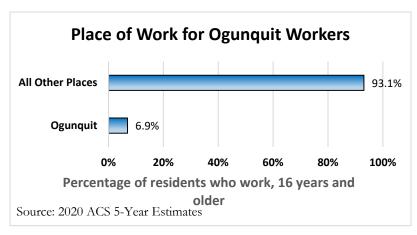
Ogunquit's Transportation Users

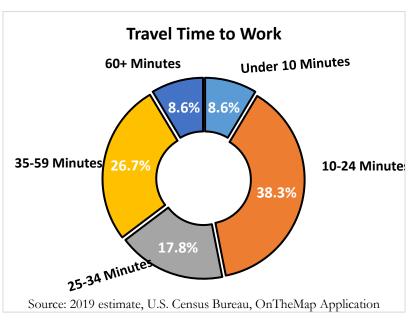
Similar to most Maine communities, the automobile supersedes all other modes as the predominant mode of transportation for Ogunquit residents and workers. Nearly 75% of all workers drove alone, while just 2% carpooled to get to work. While the automobile is dominant because of its convenience, it is notable that approximately 5% of all workers walked to work. This is a high percentage compared to other southern Maine communities and is reflective of the walkability that exists in Ogunquit. Bicycling does not appear statistically significant but that may be because workers who bicycle are not residents of Ogunquit or work seasonally.



It is also significant that around 16.2% of all workers did so from home. As the world becomes more and more interconnected via the internet, this could also have implications for the Town's transportation system as fewer residents need to leave their homes to work and contribute to traffic congestion.

A consistent issue throughout Maine and the rest of the country is that traffic tends to build up during the "commute hours," or the time(s) of day when people are driving to and from work; in transportation parlance, this is known as "peak hour" congestion. Nearly 23% of workers in Ogunquit travel less than 10 minutes to work. Around 30% of workers have commutes between 10-24 minutes. Nearly 21% of workers commute an hour or greater. Only 6.9 percent of the people who are employed and live in Ogunquit, work in Ogunquit, while





the remaining 93.1% of Ogunquit's residents who work commute elsewhere to work. Town residents have an average commute time of 29.9 minutes, per Census ACS data.

Alternatives to single occupancy vehicles

While the private automobile continues to be the primary means of transportation in Ogunquit, there are several additional motorized and nonmotorized modes of transportation, including bicycling, walking, the Ogunquit Trolley, and the Amtrak Downeaster passenger rail service. In recent years there has been a rise of personal and commercial "Low Speed Vehicle" registrations, these are used by residents and businesses for transporting people as well, typically in golf cart style vehicles.

Bicycling and Walking

Active modes of transportation such as bicycling and walking help to reduce congestion and vehicular traffic, promote healthy communities, and encourage economic vitality. Because Ogunquit is a destination community in the warmer months, its traffic flow differs from that of the average Maine community. The vehicular traffic flows denser and constant during the tourist season and ebbs considerably in the months of January – March. On any given summer day, groups of pedestrians stream

steadily along Route 1 sidewalks and downside streets towards the beach carrying beach chairs and towels. Ogunquit depends on high school/college age individuals and seasonal workers from the Caribbean and Europe to work in its many restaurants and lodging places during the warm season and this population, who are vital to the health of the local economy during a portion of the year that drives much local revenue, often do not have access to cars. Biking and walking are important modes of travel for them as well as for residents who prefer not to drive. The completion of the MaineDOT Route 1 reconstruction resulted in better and more attractive sidewalks and pedestrian crossings as well as an improved main thoroughfare.

The Bike-Pedestrian Committee in Ogunquit advocates for and helps to raise awareness of bicyclists and pedestrians in the community. The Committee strives to make walking and biking in town safe and inviting. The Committee has made bike racks available in various locations throughout town and is a member of the Bicycle Coalition of Maine.

Ogunquit Trolley

The Ogunquit Trolley is a privately owned and operated public transportation service. Ogunquit has worked diligently to keep the trolley a viable and affordable option for visitors and residents. The trolley

services Ogunquit from mid-June through Columbus Day weekend. For more information about the Ogunquit Trolley service visit their website: www.ogunquittrolley.com

Amtrak Downeaster at Wells Transportation
Center via Shoreline Explorer



The Amtrak Downeaster is a passenger rail service that runs from Boston, Massachusetts to Brunswick, Maine. The closest train station is located at the Wells Transportation Center. Although there is no public transportation connecting the Amtrak



Downeaster to Ogunquit, during the summer months, one can ride the Ogunquit Trolley to a stop near the Wells/Ogunquit line to connect to the Shoreline Explorer, which connects to the Wells Transportation Center. For more information about the Amtrak Downeaster passenger rail service visit their website: www.amtrakdowneaster.com.

Land Use and Transportation Planning Framework

Review of Land Development Applications & Impacts Mitigation

Land use and transportation are deeply intertwined; with few exceptions, in Maine, new development must generally have frontage on a public way, such as a local street or arterial road, and both the type(s) of new uses and intensity of those uses on a parcel of land have implications for the transportation

network within the jurisdiction and regionally. New development is often phased over years and the impacts of the final development, as well as the initial phase(s), on the transportation system should always be considered. The magnitude of new development determines the traffic impacts, and potential remedies (also known as *mitigation*) that the development will require to ensure that traffic flows and safety for all modes remain viable. Depending on existing traffic volumes, distribution patterns, roadway users, safety issues, and road conditions, development can often have significant impacts on the surrounding roadway network.

Certain elements of Ogunquit's land use regulatory regime stem from the outcome of a specific legal action that resulted from a proposed development. In 2006, the Ogunquit Planning Board approved an application for an age-restricted (55+) housing development on 50 acres of land located on Berwick Road. The Planning Board's approval was appealed by aggrieved parties to the York County Superior Court in a case known initially as *Ogunquit Village Estates v. The inhabitants of the Town of Ogunquit*. This case is important because it has resulted in the requirement for most development in Ogunquit located within one mile of the Berwick Road/Route 1 Intersection that either generates more than 50 new vehicle trips or requires ten or more new parking spaces to provide a Traffic Impact Study and show no new impacts to the level of service (LOS) for the impacted intersections. This sets a very high bar for any new development; many potential development opportunities have not been able to meet this threshold, and thus much development that would have otherwise occurred in the Town has not taken place as a result of these standards.

Zoning Requirements and Transportation Implications

In Ogunquit, Chapter 225 of the Town Code, *Zoning*, regulates what can be built, where it can be built, and what standards development must abide by. Subsection 225-8.13 sets forth requirements for traffic impacts and street access control. By requiring transportation impact studies for development that exceeds the thresholds set forth in that subsection, Ogunquit's Planning Board can effectively evaluate and mitigate the effects associated with any new development. Through analysis, recommendations for project phasing and developer participation in necessary improvements can be implemented and problems of safety, congestion, and expensive upgrades to roads that predate the automobile can be avoided.

Subsection 225.8.10 within the Zoning code sets forth off-street vehicle parking requirements; in the Downtown Business zones (SG and SG2), nonresidential uses (with the exception of transient accommodations) are exempted from parking requirements; in all other zones, a minimum of one parking space per use is required, with most uses requiring additional spaces using a rubric that scales the parking requirement according to square footage of the use, number of employees, or other metrics. This allows new development to provide off-street vehicle parking in proportion to the type and intensity of the new use(s).

Complete Streets Policy

Complete Streets are designed to enable safe access for all users: pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities. Complete Streets make it easy to cross the street, walk to shops, and bicycle to work. They also allow buses to run on time and make it safe for people to walk to and from train stations. Cities and towns in Maine, large or small, can begin building a safer and more welcoming street network by adopting a Complete Streets Policy and then ensuring its full implementation. With the reconstruction of Route 1 the Maine DOT provided sidewalks where none

previously existed along with numerous crosswalks right through the heavily pedestrian occupied downtown area.

As part of the complete streets policy and encouragement of bike usage in the community additional bike rack locations should be considered especially as more people are utilizing bikes to get around in the downtown area rather then attempting to maneuver vehicles in the downtown and try to find parking.

By adopting a Complete Streets Policy, communities' direct planners, engineers, and other professionals to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists, making a community a better place to live and visit. In 2017, the Town of Ogunquit developed a Complete Streets Policy with assistance from the Southern Maine Planning & Development Commission.



As mentioned earlier, U.S. Route 1 (Main Street) through Ogunquit was recently reconstructed by MaineDOT. The photo above was taken after the project was completed and is a great example of a Complete Street.

Other Existing Facilities

Electric Vehicle Charging Stations

MaineDOT, the Maine Turnpike Authority, Maine Department of Environmental Protection (DEP), as well as other agencies and organizations across Maine have been preparing a number of initiatives relating to the deployment of all electric and plug-in-hybrid vehicles. State and local governments, as well as public utility companies and private businesses have been working to expand the number of electric vehicle charging stations. According to Efficiency Maine, three EV charging stations are located within the Town:

- 518 Main St: The Dunes on the Waterfront
- 62 Beachmere Place: The Beachmere
- 74 Main St: Meadowmere Resort

All three stations are located on private property but are publicly accessible.

Public Parking

There are six public surface parking lots owned and managed by the Town of Ogunquit. There are four beach lots: Main Beach, Lower Lot, Footbridge and North Beach, and two commercial lots: Perkins Cove

and Cottage Street / Obeds. In total these lots have approximately 1050 parking spaces. From the middle of April to the middle of October each of these lots is a pay to park lot. For the 2014 season approximately 126,000 parking tickets were sold. For the fiscal year that ended June 30, 2015, gross revenue from the sale of parking spaces approximated \$1,710,000. In 2022, parking sessions jumped to 227,000 parking tickets sold resulting in a gross revenue of \$3,060,000 an increase since 2015 of \$1,350,000; this is likely the result of increased tourism following the end of the acute phase of the pandemic. The Town also issues parking passes to employees and residents: In an average year, just over 2,000 passes per season are issued, with just under 500 passes per season to employees of local businesses. [placeholder for parking space occupancy data from Town]

Conclusion

Ogunquit's transportation network, which includes the US Route 1 corridor, the Maine Turnpike, and a collection of local streets that contain a robust sidewalk grid, are generally in good condition from an infrastructure perspective; a large seasonal delta exists in terms of the burden placed on that infrastructure at high tourist season versus mid-winter, when trips generated by all travel modes tends to be lower and infrastructure is under less strain. As Ogunquit is likely to remain highly desirable driveto tourism destination from points all along the eastern seaboard for the foreseeable future, the need to accommodate vehicles in terms of both road capacity and parking will remain. However, the seasonal nature of Ogunquit's economy results in increased usage of alternative transportation modes like walking, biking, and transit during the warmer months. Additionally, new concepts in mobility, which offer additional ways of travel through electrified bicycles (e-bikes), scooters, bikeshare, and rideshare, offer opportunities to facilitate trips between destinations within the Town without adding additional vehicular strain to the street network; these modes are also potentially more affordable than private vehicles to individuals such as the seasonal workers and students who comprise a large share of the workforce during the summer months. However, allowing these travel modes to mix safely with traditional vehicular and pedestrian traffic can require creative interventions in terms of how street space is allocated and prioritized. Proliferation of electric vehicle charging, aided by efforts from Efficiency Maine and Maine DEP, offer additional opportunities to facilitate low-carbon transport within the community.