



# Transportation Needs in Maine Data Brief

Prepared for the John T. Gorman Foundation

By Maine Applied Research

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Prepared for

**JOHN T. GORMAN**  
 F O U N D A T I O N

*Building brighter futures for Maine children and their families.*

# KEY FINDINGS

Every day across Maine, thousands of people face challenges getting to work, school, and appointments, running errands, and maintaining social connections because they lack reliable transportation. This paper summarizes the publicly available data about these individuals and their households. Several key findings emerge from this review:

## **Detailed, public information about who needs to go where and when does not exist.**

There is no public repository of specific information about who in Maine needs to go where and when. Without this, it is hard for transportation providers to efficiently design, operate, and grow public transportation services.

## **Thousands of Maine households lack a vehicle.**

In 2018-2022, nearly 40,000 Maine households did not have access to a vehicle. This represents approximately 50,000 individuals of all ages. Many “zero-car” households are renters and people living by themselves. An estimated 15,000 employed workers lack a vehicle and another 52,000 live in households where the number of workers exceeds the number of vehicles.

## **There are racial and ethnic disparities in vehicle availability.**

In 2020, about 7% of White non-Hispanic households (38,000 households) lacked a vehicle. They account for the majority of zero-car households, but householders of other races and ethnicities were more likely to lack a vehicle on a percentage basis. This ranged from 10% of Asian householders to 20% of Native American householders.

## **Thousands of Mainers rely on public transportation.**

In 2018-2022, approximately 3,000 Mainers regularly commuted using public transportation. National surveys show that “transit passengers are primarily people in the most economically active years of their lives, from 25 to 64.”<sup>1</sup> Workers who take public transportation were the most likely to have long commutes; one in four (25%) spent 60 minutes or more on their one-way journey to work.

## **Thousands of Mainers do not have a driver's license.**

Nearly 90,000 Maine residents do not hold a driver's license. They include an estimated 15,200 people in their 20s, roughly equal to the 14,600 people age 75 or older who lack a license.

## **Cost is a significant barrier to licensure and vehicle ownership.**

Vehicles are expensive. In addition to their purchase cost and financing charges, they require fuel, oil, maintenance, repairs, and insurance. These expenses are even higher for older cars and households with poor credit. Studies find that transportation budgets for most Maine households exceed \$1,000 per month. The high cost of getting a license is an additional deterrent for some young people and new Mainers.

## **Maine public transportation providers are currently meeting about 11% of need.**

A conservative estimate of unmet transportation need suggests that Maine's current providers are meeting about 11% of total need (3 million out of 28 million trips per year). Reaching just 20% would mean growing current services by about 75% (an additional 2.4 million trips).

# NOTES

This data brief presents publicly available, quantifiable information on the transportation needs and barriers faced by Maine residents, with a focus on low-income households. It draws heavily from the U.S. Census Bureau's American Community Survey (ACS), as well as a variety of other federal, state, academic, and non-profit sources.

- The ACS provides one- and five-year estimates for most of the statistics in this report. One-year estimates offer a more recent snapshot of conditions but are not available for smaller geographies and have larger margins of error (MOE), especially for relatively small population subsets. Five-year estimates are available for all regions and have smaller margins of error. For example, the number of Maine workers whose commute on public transportation was 60 minutes or more was estimated to be 1,129 with an MOE of 569 (50%) for the single year of 2022 and 759 with an MOE of 168 (22%) for the five years from 2018 to 2022. For this reason, most ACS data used herein is 2018-2022.
- The ACS reports its estimates to the ones digit (e.g., 28,895 renter households lack a vehicle, with MOE of 1,434). Rather than include the MOEs for all statistics in this report, or create a false sense of precision by excluding them, we have rounded estimates to the nearest thousand or hundred when referenced in the text. Some percentages have also been rounded.
- The COVID-19 pandemic started in 2020, squarely in the middle of the ACS's most recent five-year estimates (2018-2022). It created unprecedented disruptions in the daily lives of Maine households and significantly increased the cost of housing and vehicles. Therefore, 2018-2022 averages may not reflect the full extent to which these events have changed the conditions and choices of Maine households.
- This report draws on the Census Bureau's Household Pulse Survey, developed during COVID-19 to capture real-time information on critical issues facing households. Its most recent iteration (Phase 4.2) asks several questions about transportation. This survey's sample size is small and the Census Bureau calls it "experimental", urging users to be cautious when interpreting estimates of small sub-populations.
- This data brief presents information on "households" and "householders". The Census Bureau defines a "household" as all the people who occupy a housing unit.<sup>2</sup> They may be related family members or not. The Census Bureau defines "householder" as the person in whose name the housing unit is owned or rented. If the unit is owned or rented by a couple, then either partner may be designated as the householder.
- The Census Bureau defines "workers" as household members who did any work for pay in the week prior to the survey, or who had a job but did not work the previous week due to an illness, vacation, or another reason, or who did unpaid work for their family business.
- The ACS includes one question about vehicles: "How many automobiles, vans, or trucks of one-ton capacity or less are kept at the home for the use of members of this household?"<sup>3</sup> If the answer is one or more, then the household is said to have a vehicle "available." (The survey does not include any other questions about the ownership, condition, or use of the vehicle.)
- The term "zero-car" household refers to households that lack any vehicle, including cars, vans, and trucks. It is widely used in the transportation community and, therefore, is used in this report.

# HIGH-NEED POPULATIONS

According to the Transportation Research Board, the factors that most restrict American's daily movements are lack of access to a vehicle and poverty, followed by disability and age.<sup>4</sup> Maine providers report additional obstacles, such as not having a driver's license, the cost of owning or operating a vehicle, and cultural barriers. This section presents data on zero-car households and several other populations with high transportation needs.

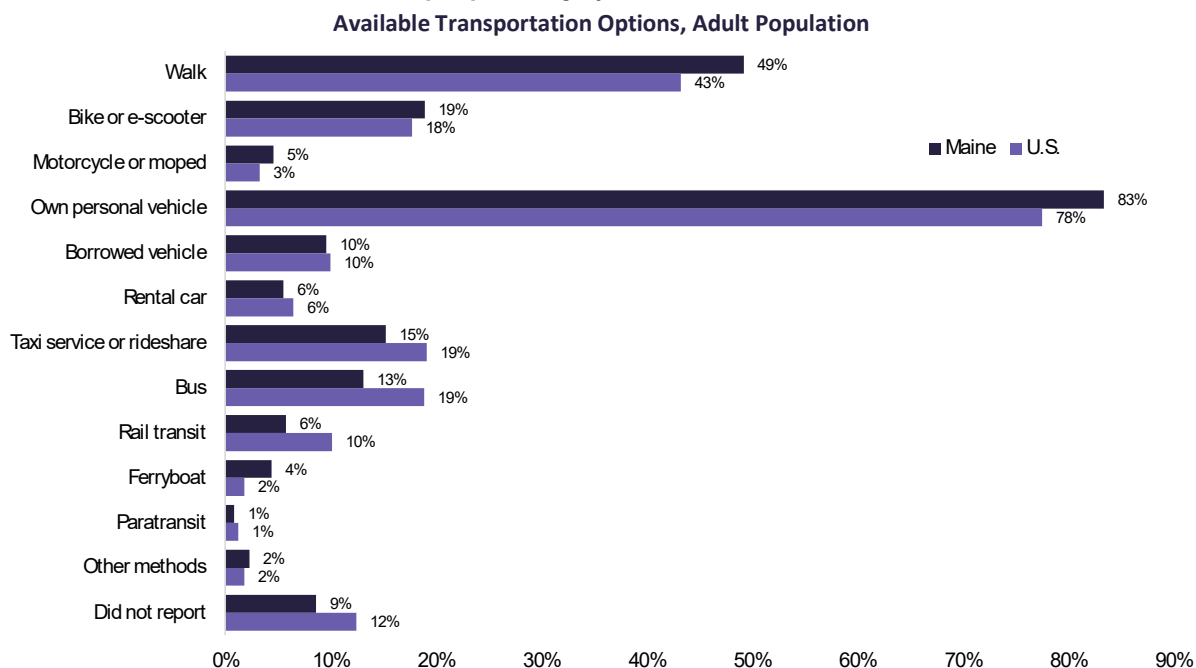
## Households and Workers Without Vehicles

**About 40,000 Maine households, accounting for about 50,000 individuals, lack a vehicle.**

In 2018-2022, 7% of Maine households (nearly 40,000) did not have access to a vehicle. This represents approximately 50,000 individuals for whom getting to work, the grocery store, or a medical appointment requires walking, biking, public transit, or getting a ride from family or friends. This estimate aligns with another survey, which finds that in August and September 2024 about 50,000 Maine adults "always" or "often" lacked enough transportation to meet their needs and another 37,000 "sometimes" lacked enough.<sup>5</sup>

Even households with a vehicle may be dependent on other means if household members need to be in different places at the same time and coordinated travel is not possible. For instance, 11,000 households (about 43,000 individuals) have four or more members and one vehicle. Anecdotal evidence suggests that these households also face challenges. If one member needs the car to get to work, others may be stranded. The chart below shows the estimated percentage of Maine adults with access to various forms of transportation. Compared to the U.S. average, Mainers are less likely to have access to buses, trains, and paratransit and more likely to have ferry access.<sup>6</sup> Car ownership is higher in Maine than elsewhere in the U.S. (83% compared to 78%).

**Many zero-car households are renters and people living by themselves.**



Nearly three out of four zero-car households (73%) are one-person households, and a similar share (72%) are renters. This means the share of zero-car households will be higher in places with robust rental markets and more one-person households. Young adults age 25 to 34 and older adults age 65 and older are most likely to live alone.<sup>7</sup> The age of householders who lack a vehicle is fairly evenly distributed, with most being age 35 to 64 (46%) or 65 and older (42%).

Share of Maine zero-car households that are...	
1-person households	73%
2-person households	17%
3-person households	5%
4-or-more-person households	4%
Householder 15 to 34 years	12%
Householder 35 to 64 years	46%
Householder 65 years and over	42%
Owner-occupied housing units	28%
Renter-occupied housing units	72%

Source: U.S. Census Bureau, American Community Survey, 2018-2022

Vehicle availability by household characteristics, 2018-2022						
	United States			Maine		
	Total	No vehicle		Total	No vehicle	
		Number	Percentage		Number	Percentage
<b>Households</b>	125,736,353	10,474,870	8.3%	580,172	39,867	6.9%
<b>By household size</b>						
1-person	35,550,232	6,302,040	17.7%	178,884	29,240	16.3%
2-person	42,558,406	2,226,146	5.2%	224,979	6,787	3.0%
3-person	19,451,108	932,293	4.8%	81,908	2,060	2.5%
4-or-more-person	28,176,607	1,014,391	3.6%	94,401	1,780	1.9%
<b>By age of householder</b>						
15 to 34 years	23,882,491	2,188,378	9.2%	89,538	4,902	5.5%
35 to 64 years	68,262,086	4,459,517	6.5%	305,909	18,352	6.0%
65 years and over	33,591,776	3,826,975	11.4%	184,725	16,613	9.0%
<b>By housing tenure</b>						
Owner-occupied	81,497,760	2,560,689	3.1%	426,239	10,972	2.6%
Renter-occupied	44,238,593	7,914,181	17.9%	153,933	28,895	18.8%
<b>By race and ethnicity of householder (2020)*</b>						
White alone	83,715,168	6,482,186	7.7%	506,586	37,776	7.5%
Black of African American alone	11,977,309	2,848,615	23.8%	1,952	275	14.1%
American Indian or Alaska Native alone	765,474	113,710	14.9%	2,735	542	19.8%
Asian alone	3,117,356	397,455	12.7%	2,191	219	10.0%
Native Hawaiian or other Pacific Islander alone	98,739	11,053	11.2%	88	15	17.0%
Other race alone	3,835,590	691,659	18.0%	647	86	13.3%
Two or more races	1,970,465	316,389	16.1%	4,001	552	13.8%
Hispanic or Latino	9,179,764	1,579,077	17.2%	2,267	262	11.6%
White Alone, Not Hispanic or Latino	79,086,566	5,767,146	7.3%	504,979	37,590	7.4%
<b>Individuals**</b>	331,097,593	15,382,631	4.6%	1,366,949	49,329	3.6%

Source: U.S. Census Bureau, American Community Survey (ACS), 2018-2022 5-Year Estimates.

\*U.S. Census Bureau, 2020 Decennial Census

\*\*Author's calculations based on household size; "4 or more" households counted as four individuals.

### There are racial and ethnic disparities in vehicle availability.

In 2020, about 7% of White non-Hispanic households lacked a vehicle. They account for the majority of zero-car households, but householders of other races and ethnicities were more likely to lack a vehicle on a percentage basis. This ranged from 10% of Asian householders to 20% of Native American householders.

Maine households by race and ethnicity of householder			
	Total	No vehicle	
		Number	Percentage
White alone	506,586	37,776	7.5%
Black of African American alone	1,952	275	14.1%
American Indian or Alaska Native alone	2,735	542	19.8%
Asian alone	2,191	219	10.0%
Native Hawaiian or other Pacific Islander alone	88	15	17.0%
Other race alone	647	86	13.3%
Two or more races	4,001	552	13.8%
Hispanic or Latino	2,267	262	11.6%
White Alone, not Hispanic or Latino	504,979	37,590	7.4%

Source: U.S. Census Bureau, Decennial Census, 2020

### Over 15,000 Maine workers lack access to a vehicle.

In 2018-2022, an estimated 15,000 employed Maine workers did not have a vehicle. This represented about 2% of all workers, below the national rate of 4%. Another 52,000 workers live in households that have a vehicle, but where the number of workers exceeds the number of vehicles. For instance, a three-worker household with one or two vehicles. These workers may be able to coordinate vehicle travel, but only if their schedules and employer-locations allow it.

### About 3,000 Maine workers regularly take public transportation to work, sometimes enduring commutes of over one hour.

In 2018-2022, most Mainers (84%) usually drove to work alone. Ten percent carpooled, 4% walked, and 0.5% (approximately 3,000 workers) used public transportation. In other words, about 1 in 200 Maine workers (0.5%) commuted using public transportation, compared to about 1 in 25 nationwide (4%). Workers who take public transportation were the most likely to have long commutes; one in four (25%) spent 60 minutes or more on their one-way journey to work.

National surveys show that, “transit passengers are primarily people in the most economically active years of their lives, from 25 to 64.”<sup>8</sup> One study found that in 2017, 79% of transit riders were in this age group, 7% were older, and 14% were younger.<sup>9</sup> Almost half (49%) of all public transit rides were people going to or from work.



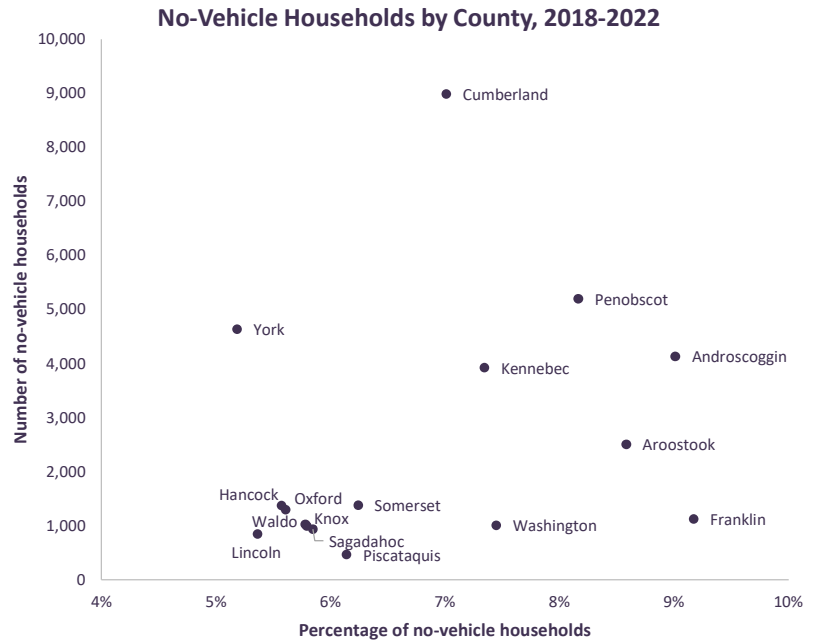
<b>Vehicle availability and means of transportation to work for workers age 16 and older, 2018-2022</b>						
	<b>United States</b>			<b>Maine</b>		
	Total	No vehicle		Total	No vehicle	
		Number	Percentage		Number	Percentage
<b>Workers</b>	155,201,468	6,626,478	4.3%	661,334	15,209	2.3%
Male	82,664,654	3,408,871	4.1%	341,810	7,517	2.2%
Female	72,536,814	3,217,607	4.4%	319,524	7,692	2.4%
<b>Workers in households with a vehicle, but with fewer vehicles than workers*</b>						
Total workers		14,452,671	9.3%		51,607	7.8%
<b>Means of transportation to work (workers who did not work from home)</b>						
Total workers		138,386,938			587,492	
Drove alone		112,314,702	81.2%		492,292	83.8%
Carpooled		13,388,082	9.7%		58,505	10.0%
Public transportation (excluding taxicab)		5,945,723	4.3%		2,999	0.5%
Walked		3,807,792	2.8%		24,157	4.1%
<b>Those within each category whose commute was 60 or more minutes (one way)</b>						
Drove alone		8,288,546	7.4%		32,324	6.6%
Carpooled		1,354,679	10.1%		5,331	9.1%
Public transportation (excluding taxicab)		2,264,502	38.1%		759	25.3%
Walked		63,407	1.7%		248	1.0%

Source: U.S. Census Bureau, American Community Survey (ACS), 2018-2022 5-Year Estimates.

\* Author's calculations based on household size; "3 or more worker" households counted as three individuals.

**There are zero-car households in every Maine county.**

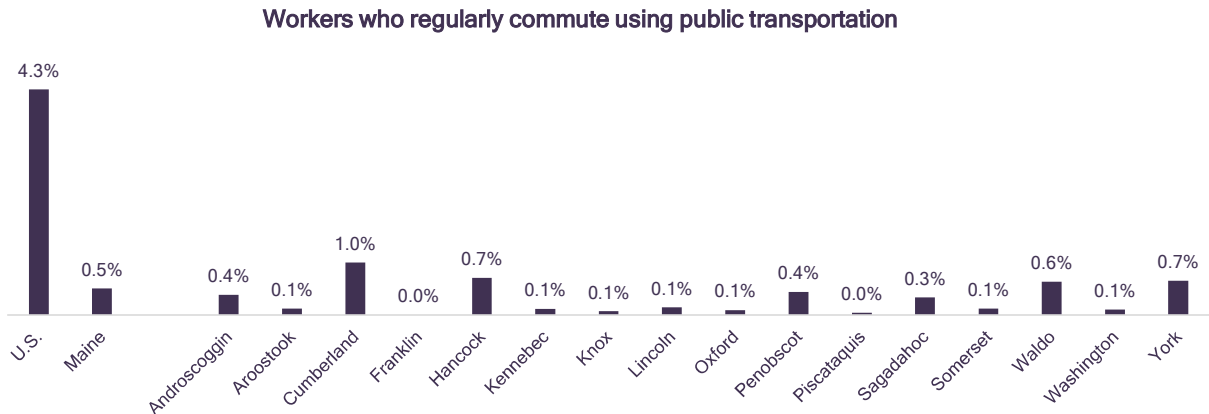
Statewide, the share of zero-car households ranges from 5% in York County to 9% in Franklin County. There are at least 1,000 zero-car households in all but three Maine counties (Lincoln, Piscataquis, and Sagadahoc) and five counties have more than 3,000 (Androscoggin, Cumberland, Kennebec, Penobscot, and York). The greatest numbers are in counties with the largest population centers: Cumberland (Portland), Penobscot (Bangor), York (Biddeford-Saco and Sanford), Androscoggin (Lewiston-Auburn), and Kennebec (Augusta). These places tend to have large rental housing stock and larger populations of low-income households, New Mainers, and younger individuals who lack vehicles.



Source: U.S. Census Bureau, American Community Survey, 2018-2022 five-year estimates

**Workers in Cumberland, Hancock, Waldo, and York counties are most likely to use public transportation.**

Just 0.5% of Maine workers commuted using public transportation in 2018-2022, but the percentage was higher in four counties: Cumberland, which has the state’s largest public transit system by ridership; Hancock, which has a transit offerings through Acadia National Park and the Jackson Laboratory; Waldo; and York, which has Biddeford-Saco-Old Orchard Beach Transit and offerings connected to Portsmouth Naval Shipyard.



Source: U.S. Census Bureau, American Community Survey, 2018-2022 five-year estimates

Vehicle availability and means of transportation to work by county, 2018-2022								
	Androscoggin	Aroostook	Cumberland	Franklin	Hancock	Kennebec	Knox	Lincoln
<b>Total households</b>	45,825	29,237	128,184	12,276	24,660	53,452	17,780	15,848
No vehicle available	4,130	2,510	8,988	1,126	1,374	3,926	1,028	850
	9.0%	8.6%	7.0%	9.2%	5.6%	7.3%	5.8%	5.4%
<b>Total population</b>	111,532	67,237	303,357	29,839	55,851	124,003	40,729	35,466
Individuals in households with no vehicle available*	4,866	3,107	11,594	1,380	1,714	5,278	1,320	991
	4.4%	4.6%	3.8%	4.6%	3.1%	4.3%	3.2%	2.8%
<b>Total owner-occupied housing units</b>	30,450	21,495	89,627	9,290	19,411	38,739	14,084	13,122
No vehicle available	572	574	2,180	358	409	846	384	376
	1.9%	2.7%	2.4%	3.9%	2.1%	2.2%	2.7%	2.9%
<b>Total renter-occupied housing units</b>	15,375	7,742	38,557	2,986	5,249	14,713	3,696	2,726
No vehicle available	3,558	1,936	6,808	768	965	3,080	644	474
	23.1%	25.0%	17.7%	25.7%	18.4%	20.9%	17.4%	17.4%
<b>Total workers age 16 years and over who did not work from home</b>	48,763	26,302	137,372	12,400	24,241	52,142	16,488	14,779
Drove alone	40,356	22,174	111,388	10,269	19,138	44,922	13,499	12,339
	82.8%	84.3%	81.1%	82.8%	78.9%	86.2%	81.9%	83.5%
Carpooled	5,884	2,890	12,827	1,273	3,324	4,820	1,828	1,900
	12.1%	11.0%	9.3%	10.3%	13.7%	9.2%	11.1%	12.9%
Public transportation (excluding taxicab)	188	33	1375	0	172	60	12	22
	0.4%	0.1%	1.0%	0.0%	0.7%	0.1%	0.1%	0.1%
Walked	1,740	741	8,920	526	1,182	1,708	929	383
	3.6%	2.8%	6.5%	4.2%	4.9%	3.3%	5.6%	2.6%

Source: U.S. Census Bureau, American Community Survey (ACS), 2018-2022 5-Year Estimates.

\* Author's calculations based on household size; "4 or more" households counted as four individuals.

Vehicle availability and means of transportation to work by county, 2018-2022								
	Oxford	Penobscot	Piscataquis	Sagadahoc	Somerset	Waldo	Washington	York
<b>Total households</b>	23,183	63,687	7,654	16,060	22,074	17,263	13,585	89,404
No vehicle available	1,300	5,200	470	939	1,378	1,000	1,012	4,636
	5.6%	8.2%	6.1%	5.8%	6.2%	5.8%	7.4%	5.2%
<b>Total population</b>	58,276	152,640	16,936	36,868	50,656	39,772	31,096	212,691
Individuals in households with no vehicle available*	1,685	6,238	537	1,102	1,606	1,392	1,206	5,343
	2.9%	4.1%	3.2%	3.0%	3.2%	3.5%	3.9%	2.5%
<b>Total owner-occupied housing units</b>	18,627	44,498	5,909	12,319	16,954	13,911	10,645	67,158
No vehicle available	549	1,294	156	372	540	403	317	1,642
	2.9%	2.9%	2.6%	3.0%	3.2%	2.9%	3.0%	2.4%
<b>Total renter-occupied housing units</b>	4,556	19,189	1,745	3,741	5,120	3,352	2,940	22,246
No vehicle available	751	3,906	314	567	838	597	695	2,994
	16.5%	20.4%	18.0%	15.2%	16.4%	17.8%	23.6%	13.5%
<b>Total workers age 16 years and over who did not work from home</b>	22,907	65,428	6,426	16,412	19,945	15,674	11,322	96,891
Drove alone	19,822	55,613	5,332	14,050	16,827	13,524	9,422	83,617
	86.5%	85.0%	83.0%	85.6%	84.4%	86.3%	83.2%	86.3%
Carpooled	2,052	5,496	648	1,436	2,366	1,289	1,420	9,052
	9.0%	8.4%	10.1%	8.7%	11.9%	8.2%	12.5%	9.3%
Public transportation (excluding taxicab)	21	290	3	55	25	99	12	632
	0.1%	0.4%	0.0%	0.3%	0.1%	0.6%	0.1%	0.7%
Walked	717	2,477	355	626	521	527	406	2,399
	3.1%	3.8%	5.5%	3.8%	2.6%	3.4%	3.6%	2.5%

Source: U.S. Census Bureau, American Community Survey (ACS), 2018-2022 5-Year Estimates.

\* Author's calculations based on household size; "4 or more" households counted as four individuals.

## Low-Income Households

Transportation may be especially difficult for the 31,000 employed Mainers living below the poverty line.

In 2022, about 1 in 9 Mainers (11% or 147,000 residents) lived in a household with income below the federal poverty line.<sup>10</sup> These include approximately 31,000 employed workers (based on 2018-2022 data). For these individuals, transportation is key to reaching the jobs and earnings they so critically need. If they own a vehicle, one car repair or unpaid bill can undermine their ability to get to work. The table below shows that almost two in three employed Maine workers live in the counties with its largest cities: Portland, Bangor, Augusta, Lewiston-Auburn, Biddeford, Saco, and Sanford.

Employed workers, 2018-2022			
	Total	Household income below poverty line	
		Number	Percentage
United States	157,913,626	8,929,884	5.7%
Maine	675,139	30,864	4.6%
Cumberland County	164,741	5,412	3.3%
Penobscot County	72,130	4,522	6.3%
York County	112,170	4,027	3.6%
Kennebec County	59,433	2,640	4.4%
Androscoggin County	55,267	2,354	4.3%
Somerset County	22,560	1,728	7.7%
Aroostook County	28,539	1,637	5.7%
Hancock County	27,588	1,602	5.8%
Oxford County	26,049	1,403	5.4%
Waldo County	18,265	1,087	6.0%
Knox County	19,392	895	4.6%
Sagadahoc County	19,067	855	4.5%
Franklin County	13,495	849	6.3%
Washington County	12,627	842	6.7%
Lincoln County	16,748	657	3.9%
Piscataquis County	7,068	354	5.0%

Source: U.S. Census Bureau, American Community Survey (ACS), 2018-2022 5-Year Estimates.

In August-September 2024, the U.S. Census Bureau's Household Pulse Survey suggested that about 10,500 Mainers were unemployed due to a lack of transportation, and about 31,500 had insufficient access to food due to a "transportation, mobility, or health limitation".<sup>11</sup>

Community Action Agencies regularly evaluate the top challenges facing Maine's low-income households. In their most recent needs assessment, transportation was one of the top five needs of Mainers with low incomes (along with affordable housing, childcare, health care, and overcoming generational poverty).<sup>12</sup> In particular, the agencies found that transportation "...remains a persistent barrier for young people finding better jobs, and those needing to travel for treatment."<sup>13</sup>

Maine Equal Justice Partners (MEJP) found transportation to be a top challenge of low-income parents enrolled in the Higher Opportunity Pathways for Education (HOPE) program. HOPE provides scholarships and supports to parents as they pursue postsecondary education and training. MEJP provides additional financial support to individuals in the program. In a 2023 survey of participants, transportation was the top “pressing need” for which participants sought assistance, ahead of many other utilities and expenses, and 85% said transportation expenses were “regularly difficult to cover”.<sup>14</sup> “Study participants reported relying almost solely on their car not only to get to their educational program but to also bring their children to school, appointments, therapy, and to shop for food, clothing and other necessities. Without a car, most are stuck, especially the 60.0% of survey respondents who live in rural and semi-rural areas.”<sup>15</sup>

## People With Mobility Limitations

**About 44,000 working-age Mainers have a disability that limits independent living.**

According to the Transportation Research Board, individuals with a disability that causes difficulty living independently “are thought to be the group most likely to require passenger transportation services.”<sup>16</sup> The ACS asks a very specific question on this topic: “Because of a physical, mental, or emotional condition, does this person have difficulty doing errands alone such as visiting a doctor’s office or shopping?”<sup>17</sup> In 2023, about 5% of Mainers age 18-64 had this type of disability. This is slightly above the U.S. average of 4% and represents about 44,000 Mainers.

## Older Residents

**Maine has a growing population of older residents, who may benefit from public transit.**

Maine’s status as one of the oldest U.S. states is well known. In 2020, 21% of residents were age 65 and older, and this is projected to rise to 30% by 2040.<sup>18</sup> In some places, the share of older residents will be even higher - in Hancock, Knox, Lincoln, Piscataquis, and Sagadahoc counties, more than one in three people of will be age 65 or older.

Older householders are more likely not to have a vehicle than their younger neighbors, so an increase in the percentage of older residents will likely increase the number of zero-car households. The table below shows the number of zero-car households by age of householder in 2018-2022, the projected change of these age groups from 2020 to 2040, and the resulting projection of zero-car households in 2040. These projections do not account for changes in patterns of household formation, vehicle use and ownership, or licensure that may occur during this period. Based on these conditions, the number of zero-car households in Maine may grow 15%, from about 40,000 in 2018-2022 to 46,000 in 2040 simply due to the aging of the population.

Projection of 2040 zero-car households			
	Total	No vehicle	
		Number	Percentage
<b>2018-2022: Age of householder</b>			
15 to 34 years	89,538	4,902	5.5%
35 to 64 years	305,909	18,352	6.0%

65 years and over	184,725	16,613	9.0%
<b>Total</b>	<b>580,172</b>	<b>39,867</b>	<b>6.9%</b>
<b>Projected change of age group, 2020-2040<sup>19</sup></b>			
15 to 34 years	-11%		
35 to 64 years	-6%		
65 years and over	46%		
<b>2040: Age of householder</b>			
15 to 34 years	79,971	4,378	5.5%
35 to 64 years	287,073	17,222	6.0%
65 years and over	269,201	24,210	9.0%
<b>Total</b>	<b>636,246</b>	<b>45,811</b>	<b>7.2%</b>
<b>Change in zero-car households (2018-2022 to 2040)</b>			
Number	56,074	5,944	
Percentage	9.7%	14.9%	

Source: Author's calculations based on U.S. Census Bureau, ACS, 2018-2020 five-year estimates and demographic projections from the State of Maine, Department of Administrative and Financial Services, 2023.

## New Mainers

### Costs and cultural barriers pose unique challenges for residents arriving from other countries.

In 2023, Maine had an estimated 24,000 foreign-born residents who had entered the U.S. in 2010 or later.<sup>20</sup> An estimated 5,800 have arrived since 2020.<sup>21</sup> In addition to the financial and logistical barriers of owning a vehicle, some of these residents come from places and circumstances where driver's licenses and vehicle ownership were either unnecessary or unobtainable. Moreover, Maine is one of 31 states that does not allow unauthorized workers to obtain driver's licenses.<sup>22</sup> This creates an additional hurdle for some immigrants. The number of unauthorized workers in Maine is not known but one estimate put it at less than 1% of workers.<sup>23</sup>

## Migrant and Seasonal Farmworkers

### Transportation can be a challenge for farmworkers and their families.

According to the U.S. Department of Agriculture, in 2022, Maine farms employed 7,267 seasonal workers (those who work for less than 150 days) and 1,919 migrant workers (those who work at jobs over 75 miles apart or traveled over 75 miles for work in the past 12 months).<sup>24</sup> There is little documentation of the challenges faced by these workers and their families, but anecdotal evidence suggests that transportation is one of them. Without access to a personal vehicle, many workers must rely on farmers, farmers' families, or other workers for rides to shop for groceries or other personal items; to access medical, educational, or legal services; or to attend social functions. These logistical barriers are complicated by economic factors. Nationwide, 21% of crop workers had family incomes below the poverty line in 2021-2022.<sup>25</sup> This share was even higher for migrant workers (41%) and workers with larger families (as high as 36% for families with six or more members).<sup>26</sup>

## People Without Driver's Licenses

Nearly 90,000 Maine residents do not hold a driver's license. They include about 15,200 people in their 20s, which roughly equals the 14,600 people age 75 or older who lack a license.

The vast majority (92%) of Maine adults hold a driver's license but the 8% who do not represent nearly 90,000 individuals spanning every age group. While this characteristic is often mentioned in connection with older residents, a comparison of license holders and Maine residents by age shows the number of people in their 20s who lack a license may exceed the number of people age 75+.

Maine driver's license holders by age, 2023					
Age	Residents	License holders		Non-license holders	
		Number	Percentage	Number	Percentage
Under 19*	62,281	36,094	58%	26,187	42%
20-24*	73,788	64,101	87%	9,687	13%
25-29	79,660	74,106	93%	5,554	7%
30-34	89,061	85,819	96%	3,242	4%
35-39	88,353	87,922	100%	431	0%
40-44	84,752	82,408	97%	2,344	3%
45-49	77,974	76,022	97%	1,952	3%
50-54	88,811	84,651	95%	4,160	5%
55-59	97,083	91,490	94%	5,593	6%
60-64	109,409	103,452	95%	5,957	5%
65-69	103,987	99,143	95%	4,844	5%
70-74	86,440	82,497	95%	3,943	5%
75-79	62,098	59,752	96%	2,346	4%
80-84	36,617	33,957	93%	2,660	7%
85+	31,699	22,070	70%	9,629	30%
<b>Total</b>	<b>1,172,013</b>	<b>1,083,484</b>	<b>92%</b>	<b>88,529</b>	<b>8%</b>
20-29	153,448	138,207	90%	15,241	10%
75+	130,414	115,779	89%	14,635	11%

Sources: State of Maine, Bureau of Motor Vehicles, driver license information for 2023; U.S. Census Bureau, annual estimates of the resident population by single year of age, July 1, 2023; National Center for Education Statistics, Integrated Postsecondary Education Data System, residence and migration of first-time degree/certificate-seeking undergraduates by state, fall 2022.

\*Resident count of 18-21-year-olds reduced to account for out-of-state college students.

### The cost of getting a driver's license is a barrier for some young people and new Mainers.

Since at least the 1980s, the rate at which U.S. teenagers get driver's licenses has fallen for a variety of reasons, one of which is cost.<sup>27</sup> An informal web search of driver's education classes around Maine found prices ranging from \$500 to \$600. The State of Maine charges \$35 for a learner's permit, \$70 for a license



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exam, and requires drivers under age 21 to log 70 hours of practice driving with a more experienced driver. These financial and logistical hurdles can be difficult or impossible for families that lack a vehicle or have a vehicle but lack the time to use it for practice driving.

# COST OF VEHICLE DEPENDENCY

Living in a rural state, vehicle access is essential for many Maine households, but purchasing, operating, and maintaining a vehicle is costly.<sup>1</sup> This section presents estimates of these costs from two sources.

## Owning and operating a vehicle is expensive.

One estimate of the cost of vehicle dependency comes from the United Way. This organization identifies a category of Asset-Limited, Income-Constrained (“ALICE”) households with incomes above the federal poverty line but below the level of financial stability.<sup>28</sup> To determine which households fall into this category, the United Way constructs “survival” and “stability” budgets that draw from an extensive collection of national datasets.<sup>29</sup> The “survival budget” covers the minimum expenses of the average low-income household and does not allow for any savings that could be used in an emergency. The “stability budget” allows for 10% savings and higher spending across other categories. Both budgets are broken into eight categories: housing, childcare, food, transportation, technology, health care, taxes, and miscellaneous. Transportation includes the costs of gas, oil, maintenance, minimal insurance, and depreciation, but not the cost of major repairs or car payments.<sup>2</sup> The table above shows the transportation costs for each budget. United Way notes that this likely underestimates costs for households with low credit scores, which may be charged higher insurance rates.<sup>30</sup>

The Massachusetts Institute of Technology’s Living Wage Institute publishes a similar “basic needs” budget based on actual transportation expenditures of households earning 80% of a region’s median income, as reported on national surveys.<sup>31</sup> These estimates include the cost of vehicle financing and repairs, and are higher than the ALICE estimates. They reflect the use of public transportation where available.

Monthly household transportation costs, Maine 2022		
	“Survival budget”	“Stability budget”
Single adult	\$396	\$801
One adult, one child	\$529	--
Two adults	\$636	\$1,076
Two adults, two children	\$1,046	\$1,559

Source: United for ALICE

“Basic needs” transportation budget, Maine, 2023			
		Monthly	Annual
<b>1 Adult</b>	0 Children	\$865	\$10,378
	1 Child	\$1,001	\$12,011
	2 Children	\$1,261	\$15,129
	3 Children	\$1,451	\$17,408
<b>2 Adults (1 working)</b>	0 Children	\$1,001	\$12,011
	1 Child	\$1,261	\$15,129
	2 Children	\$1,451	\$17,408
	3 Children	\$1,449	\$17,388
<b>2 Adults (both working)</b>	0 Children	\$1,001	\$12,011
	1 Child	\$1,261	\$15,129
	2 Children	\$1,451	\$17,408
	3 Children	\$1,449	\$17,388

Source: Massachusetts Institute of Technology, Living Wage Institute, 2024

<sup>1</sup> In 2018-2022, Maine ranked 32<sup>nd</sup> of the 50 states for the percentage of households with access to a vehicle and 31<sup>st</sup> for the number of motor vehicles registered per capita. Source: Valentine, Ashlee, “[Car Ownership Statistics 2024](#),” Forbes Advisor, 28 March 2024.

<sup>2</sup> The ALICE transportation budget includes public transportation in places where at least 8% of the metro-region or county population uses public transportation to commute to work. Since no region in Maine has reached this threshold, the ALICE budget for Maine is assumed to reflect only vehicle transportation.

## Transportation expenses are highest in rural counties.

The Living Wage Institute's analysis shows higher transportation costs in Maine's rural counties, and lower costs in more populated areas with some level of public transportation. In 2023, the estimated expenses of an adult in rural Oxford or Franklin counties was 20% (nearly \$2,000) more than someone in more urban Androscoggin county.

<b>"Basic needs" transportation budget for 1 adult and 0 children, by county (lowest to highest), 2023</b>			
	<b>Monthly</b>	<b>Annual</b>	<b>Comparison to state average</b>
<b>Androscoggin</b>	\$791	\$9,491	-9%
<b>Penobscot</b>	\$831	\$9,967	-4%
<b>Kennebec</b>	\$835	\$10,017	-3%
<b>Aroostook</b>	\$836	\$10,026	-3%
<b>Cumberland</b>	\$848	\$10,178	-2%
<b>Washington</b>	\$858	\$10,301	-1%
<b>Knox</b>	\$867	\$10,409	0%
<b>Somerset</b>	\$870	\$10,440	+1%
<b>Piscataquis</b>	\$888	\$10,661	+3%
<b>Lincoln</b>	\$890	\$10,681	+3%
<b>Waldo</b>	\$896	\$10,749	+4%
<b>Hancock</b>	\$904	\$10,853	+5%
<b>York</b>	\$913	\$10,951	+6%
<b>Sagadahoc</b>	\$913	\$10,955	+6%
<b>Oxford</b>	\$947	\$11,362	+9%
<b>Franklin</b>	\$948	\$11,376	+10%

Source: Massachusetts Institute of Technology, Living Wage Institute, 2024

## CALCULATION OF UNMET NEEDS

This section uses a methodology developed by the Transportation Research Board (TRB) to estimate unmet need for public transit in rural places.<sup>32</sup> The Maine Public Transit Advisory Council’s (PTAC) 2019 report also utilized this approach.<sup>33</sup> The TRB’s methodology involves calculating the “mobility gap” which is “the total number of trips not taken because members of zero-car households do not have the ease of mobility available to members of households with ready access to a car.”<sup>34</sup> Calculating the gap involves comparing the number of trips taken by zero-car and one-car households, as reported in the Federal Highway Administration’s National Household Transportation Survey (NHTS).

The PTAC 2019 report used mobility gaps derived from the 2009 NHTS. The following calculation updates the estimates using 2017 NHTS results.<sup>3</sup> It utilizes nationwide results based on county size and Metropolitan Statistical Area (MSA) classification as defined by the U.S. Census Bureau. National results are used because the margins of error for New England were very high for some variables (e.g., over 50% for trips taken by zero-car households in MSAs of less than 250,000 people). Cumberland, Sagadahoc, and York counties are in the Portland-South Portland MSA, which has a population of over 500,000. Androscoggin and Penobscot counties constitute the Lewiston-Auburn and Bangor MSAs, respectively, with populations below 250,000. All other Maine counties are not in an MSA.

Maine Metropolitan Statistical Areas (MSAs)	Population (2023)	Counties
Lewiston-Auburn	113,765	Androscoggin
Bangor	155,312	Penobscot
Portland-South Portland	566,329	Cumberland, Sagadahoc, York

Source: U.S. Census Bureau, Population Estimates: Vintage 2023.

The calculations below result in mobility gaps ranging from 1.4 daily person-trips for rural counties not in an MSA to 2.9 for counties in MSAs with populations of 250,000-499,999. “Person trips” are trips from one address to another address taken by a single person. Two people traveling in one vehicle would count as two person-trips.

<sup>3</sup> The Federal Highway Administration conducted the NHTS again in 2022 but with a much smaller sample, so the results have much higher margins of error.

<b>Mobility gap calculation</b>							
		<b>Population of MSA in which household is located</b>					
Not in MSA		< 250,000	250,000 - 499,999	500,000 - 999,999	1,000,000 - 2,999,999	≥ 3 million	
<b>Total annual person-trips*</b>							
Household vehicles	0	1,947,366,170	1,085,551,519	799,447,520	1,562,344,222	3,337,634,508	10,184,183,379
	1	11,401,551,223	8,537,827,795	8,545,308,567	10,665,567,783	20,442,445,480	34,372,901,088
<b>Number of households*</b>							
Household vehicles	0	1,205,832	773,481	619,474	1,044,135	1,804,827	5,119,009
	1	5,318,684	3,711,235	3,652,024	4,633,728	8,714,194	13,617,708
<b>Annual person-trips per household (trips divided by households)</b>							
Household vehicles	0	1,615	1,403	1,291	1,496	1,849	1,989
	1	2,144	2,301	2,340	2,302	2,346	2,524
<b>Daily person-trips per household (annual divided by 365)</b>							
Household vehicles	0	4.4	3.8	3.5	4.1	5.1	5.5
	1	5.9	6.3	6.4	6.3	6.4	6.9
<b>Daily mobility gap (difference in daily person-trips between 0- and 1-vehicle households)</b>							
		1.4	2.5	2.9	2.2	1.4	1.5

\*Source: U.S. Department of Transportation, Federal Highway Administration, 2017 [National Household Transportation Survey](#).

The next step is to apply these mobility gap estimates to the number of zero-car households in each county. In the table below, the number of zero-car households in each county is multiplied first by the daily mobility gap and then by 365 days. The 2019 PTAC report multiplied the daily need by 300 to account for reduced travel on weekends. For the current calculation, these reduced travel days are already reflected in the annual person-trips reported in the 2017 NHTS, so multiplying by 300 would result in an undercount.

<b>Need calculation</b>				
County	Households*	Zero-car households*	Daily mobility gap	Annual need (trips)
Androscoggin	45,825	4,130	2.5	3,768,625
Aroostook	29,237	2,510	1.4	1,282,610
Cumberland	128,184	8,988	2.2	7,217,364
Franklin	12,276	1,126	1.4	575,386
Hancock	24,660	1,374	1.4	702,114
Kennebec	53,452	3,926	1.4	2,006,186
Knox	17,780	1,028	1.4	525,308
Lincoln	15,848	850	1.4	434,350
Oxford	23,183	1,300	1.4	664,300

Penobscot	63,687	5,200	2.5	4,745,000
Piscataquis	7,654	470	1.4	240,170
Sagadahoc	16,060	939	2.2	754,017
Somerset	22,074	1,378	1.4	704,158
Waldo	17,263	1,000	1.4	511,000
Washington	13,585	1,012	1.4	517,132
York	89,404	4,636	2.2	3,722,708
<b>Total</b>				<b>28,370,428</b>

\*Source: U.S. Census Bureau, American Community Survey, 2018-2022 five-year average

The table above suggests that the total trips needed by Maine's zero-car households is over 28 million. This is likely an underestimate of total need because many other households would likely benefit from and utilize public transportation. These include households where the number of workers exceeds the number of vehicles, low-income households that would prefer a less expensive alternative to vehicles, older residents, and people with mobility limitations.

The total trip-need calculated in the 2019 PTAC report was 36,785,091, about 30% higher. This may be because the mobility gaps used in the 2019 calculation were higher: 1.7 for "rural areas" and 5.2 for "urban areas". Neither the author nor NHTS staff were able to verify or replicate these figures using 2009 survey data. NHTS staff noted that the 2009 NHTS survey results were revised once after their initial release. Therefore, it is possible the mobility gaps used in 2019 were calculated using unrevised data that is no longer available.

The table below shows the number of unlinked trips provided by Maine's public transit providers in 2022 as reported in the National Transit Database (NTD). It does not include ferry services, in keeping with the methodology of the 2019 PTAC report. Nor does it include the Amtrak Downeaster train.

Trips provided	
Provider	Unlinked trips (2022)
Aroostook Regional Transportation Systems, Inc.	46,767
Biddeford-Saco-Old Orchard Beach Transit	171,828
City of Bangor	404,263
City of Bath	10,525
Downeast Community Partners, Inc.	32,934
Downeast Transportation, Inc.	326,246
Greater Portland Transit District	1,260,110
Houlton Band of Maliseet Indians	270
Kennebec Valley Community Action Program	118,518
Lewiston-Auburn Transit Committee	207,779
Penquis Community Action Program	238,379
Regional Transportation Program, Inc.	48,929
City of South Portland	150,653
Waldo Community Action Partners	44,561
West's Transportation, Inc.	4,719

Western Maine Transportation Services, Inc.	123,829
York County Community Action Corporation	61,393
<b>Total</b>	<b>3,251,703</b>

Source: U.S. Department of Transportation, Federal Transit Administration, National Transit Database, 2022 agency profiles.

The 3.3 million trips provided by Maine transit providers in 2022 correspond to about 11% of estimated trip need. The TRB notes that levels of need calculated with this methodology generally exceed the number of trips observed in rural transportation systems.<sup>35</sup> Many trips are either not taken or fulfilled by rides from family or friends. The TRB advises planners to set a percentage target of need to be met: “In the testing of these suggested methodologies with a number of rural transit agencies, it was found that, at best, only about 20% of the mobility gap trip-based need was met.”<sup>36</sup> The table below shows a hypothetical target of 20%, equivalent to 5.7 million trips. The remaining unmet need is 2.4 million trips. This is equivalent to increasing the capacity of the current system by about 75%.

100% of trip need (2018-2022)	20% of trip need (2018-2022)	Trips provided (2022)	Trip gap (2022)	Percent of need being met by current trips
28,370,428	5,674,086	3,251,703	2,422,383	11%

Source: Author’s calculations based on TRB methodology and data from the NHTS, ACS, and NTD.

# ENDNOTES

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<sup>33</sup> TRB, 2013, and Maine Department of Transportation, Public Transit Advisory Council, "[Biennial Report to Governor and Legislature](#)," April 2019.

<sup>34</sup> TRB, 2013, pp 13.

<sup>35</sup> TRB, 2013.

<sup>36</sup> TRB, 2013, pp 17.