



MaineDOT

Maine Strategic Transit Plan 2025

Transforming Public Transit,

Meeting Future Needs,

Managing Expectations and Resources



Credits and Official Notices

*This ten year strategic transit plan was prepared by
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Preface

This report was prepared over the period July 2013 through December 2014 for the public transit mode of bus and van transportation. A major challenge in preparing the report was the substantial change in the operating environment for transit service providers in Maine. During this period, as a result of a federal mandate from the Center for Medicaid Services (CMS), the MaineCare non-emergency medical transportation was placed into a brokerage. Instead of the service providers themselves coordinating trips a broker allocated trips to the various service providers. This meant that the “business as usual” mix of Federal Transit Administration services and MaineCare services which had gone essentially unchanged for 30 years was no longer functioning. One long time transit service provider dropped out of the MaineCare program, and all transit providers found themselves in a new paradigm, uncertain of cost recovery or service delivery schemes.

The challenge described above meant that there were no long-term comparative service methodologies that could be used in the preparation of this report for estimating costs and that cost data needed to be collected twice, once from 2012 and again from 2013, to gain a more accurate estimate of what costs might be. The change to a brokerage process also meant that existing procedures of purchasing capital equipment to help support MaineCare and provide services to the general public needed to be re-examined. These elements contributed to a state of flux and uncertainty for the preparation of this report and a reexamination of the role and purpose of MaineDOT’s participation in public transit.

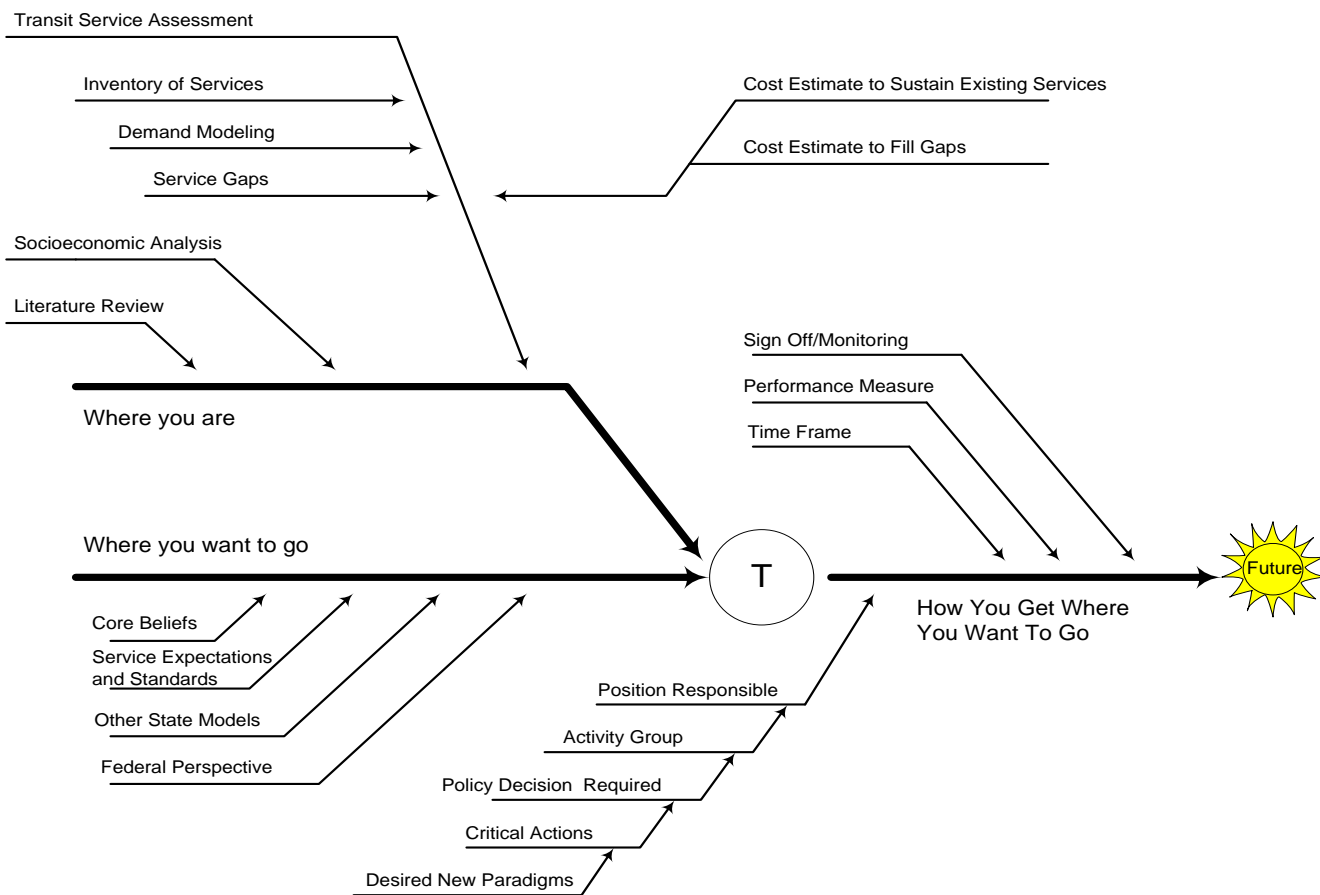
In spite of the challenge of calibrating costs and service levels in a changed and unsettled environment, the research and data prepared in support of this report proceeded and fostered clear statements of needs and potential policies and procedures for MaineDOT.

Approximately a thousand pages of technical memoranda were prepared in support of the recommendations in the report. The technical memorandum were prepared to answer the three essential questions of strategic planning:

1. Where are we? (An inventory of existing conditions)
2. Where do we want to go? (An assessment of goals and the creation of a vision)
3. How do we get from where we are to where we want to go? (Steps to achieve the vision)

These questions, along with key research questions that were addressed during the course of the study, are shown on *Figure 1: The Three Questions of Strategic Planning*.

Figure 1: The Three Questions of Strategic Planning



The technical memoranda are available on the MaineDOT website. Each chapter of the report lists the technical memoranda for persons to read who want more background for any section. Also on the website are the summary minutes of the advisory committee meetings with accompanying PowerPoint presentations that further amplify the findings of this report and provide more background for readers.

Acknowledgements and Introduction to Steering Committee

The guiding principles of the research team were that the final report and plan be data-driven and that the recommendations be considered and discussed by transit stakeholders and persons concerned with the importance of public transit in Maine. MaineDOT created a Steering Committee to do just that, and meetings were held over the next 18 months. The Steering Committee played a significant role in the evaluation of data and the discussion of the goals and recommendations. All the Steering Committee agendas, discussion summaries and materials presented at each meeting are located on the MaineDOT website. However, the final goals and recommendations presented in this report represent the opinions of the fundamental driving force for preparation and implementation of this plan, which is MaineDOT.

The assistance and advice of the Steering Committee as well as the MaineDOT staff who helped organize and maintain the proceedings of the committee is gratefully acknowledged. The direction of the Steering Committee can be characterized by the following representative thoughts from members of the Steering Committee:

- Public transportation should be “an option to the automobile. Services should be designed to benefit our society as a whole. The better we can do at designing services to benefit the mainstream public, the better we will do for everyone, including being a safety net for the most needy.”
- MaineDOT “needs to consider how to reinforce the limited options in many rural areas that lack density and provide more options. There will never be enough state and federal money to solve this problem.”
- MaineDOT “needs to think more creatively about how it invests public money to leverage private and nonprofit investors, volunteers, businesses in solving the problems.”

The following section lists the members of the Steering Committee.

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Maine Strategic Transit Plan 2025

Transforming Public Transit

Meeting Future Needs

Managing Expectations and Resources

Abstract

The purpose of this report is to set out a 10-year comprehensive public transit strategic plan for the period 2015-2025 that will assist MaineDOT in prioritizing service improvements and identifying performance measures and standards for responding to the need for public bus and van type transit services. The report is based on current transit service data analysis, general population surveys, rider surveys, providers of transit surveys and interviews with peer state transit unit staff. A Steering Committee advised in the preparation of this report.

FY 2013 transit operating costs for existing services (based on FY 2013 data submitted by transit providers and included in the Cost Overview Technical Memorandum, Tasks 14 & 15) include \$18.1 million for intercity, fixed route and flex route services, and \$17.5 million for demand response providers, for total current operating costs of \$35.6 million. Continuation of existing services requires an estimated \$9.5 million per year for replacement vehicles (based on the 10-year capital projections contained in this plan). Currently, only about half of the needed funding (about \$4.75 million) has been made available through FY 2018. Total FY 2013 operating and capital costs to continue existing services are estimated to be \$45.1 million if 100% of replacement costs were to be funded.

Based on national studies, models and experience, it was determined that meeting 20% of the theoretical demand for transit was an acceptable level of service for transit in Maine. The report describes how the 20% level of service was set (it is based on the trip needs of no-vehicle households). While this may seem like a small percentage of demand to meet, to advance the statewide percent of demand met for given geographic areas ranges from 0% of demand met (no public transit service) to 31%, the costs to meet the 20% average level can be formidable. With a statewide average of 17%, boosting the average to 20% will require additional funds and/or substantial increases in the efficiency and effectiveness of existing service providers. Estimates of additional annual operating and administrative costs to achieve the 20% goal range from \$7.4 million, based on lowest best current cost expenditures, to \$14 million based on current average cost expenditures. In addition it is projected that another \$1.1 million (for lowest current cost

services) to \$2.1 million (for current average cost services) for capital expenditures are needed to meet 20% of the theoretical demand. In total, it would cost between \$8.5 million and \$16.2 million more per year to meet 20% of theoretical demand. The Steering Committee concluded that addressing 20% of the theoretical demand would also help better meet the transit needs of the elderly, the disabled, and Maine's low income population.

Total annual expenditures for bus and van type transit to meet the 20% level of service are estimated to range from \$53.6 million to \$61.3 million per year. The report recommends policies and areas of emphasis for the MaineDOT transit unit and concludes with first steps for taking action to meet the 20% goal.



Executive Summary

Maine Strategic Transit Plan 2025

*Transforming Public Transit,
Meeting Future Needs,
Managing Expectations and Resources*



Draft Final Executive Summary

Maine Strategic Transit Plan 2025

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Introduction

For some time the assumption prevailed that if adequate streets, roads, and highways were constructed and maintained, then satisfactory levels of mobility for residents automatically would be achieved. Even with adequate roads and bridges, elderly persons, persons without cars, low-income, young people and disabled persons still have a mobility problem and often cannot access health care, jobs or other activities. The mobility problem has worsened over the last decade due to the increasing numbers of elderly people who are either unable to drive or have limited driving ability. Adding to the problem of mobility is the current pattern of land use (notably “sprawl” and cul-de-sacs) and especially the development of polycentric cities (cities where there are multiple primary destinations and no single city center). These developments have made provision of transit services more problematic and costly.

A fundamental challenge for public transit service is the development of a rational service delivery mechanism and service-level expectation coupled with service standards. No one in any United States governmental unit or academic unit has been able to state a universally accepted standard minimum level of mobility for individuals, and there exists no levels of service standards similar to those of postal delivery or public education. Meaning, for public education, everyone in the United States is expected to go to school through the eighth grade. Concerning the postal service, minimum expectations are mandated by Congress that everyone should have postal service six days a week, even though service to rural areas was not “profitable.” And, despite attempts to discontinue Saturday delivery, the minimum level of six days per week service has continued. No comparable service standards have been developed for public transit. If developed, standards could then be translated into capital and operating cost estimates that would allow a rational funding scheme to develop.

The key mobility problems to be solved for the State of Maine’s future and current population, economic conditions, and social conditions revolve around service standards. What are reasonable service standards and what will be the cost to implement those standards? In addition, who will ride and who will pay?

The Maine Strategic Transit Plan 2025 is a 10-year comprehensive transit plan for the period 2015-2025 that will assist MainedOT in answering the above questions and help in prioritizing service improvements and identifying performance measures and standards for responding to the need for transit services. The plan is a comprehensive approach to evaluating public transit initiatives, programs, and funding sources, with a particular focus on Maine’s aging population. In addition, the plan makes recommendations on best practices for transit planning and funding strategies.

The Vision

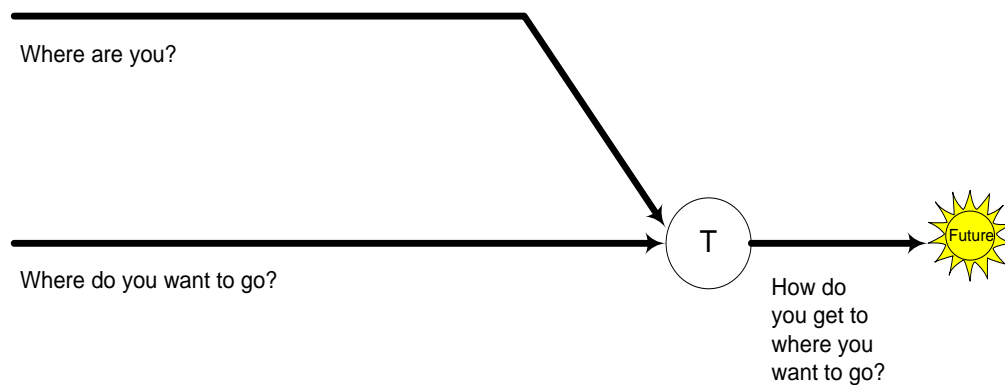
Maine citizens’ access to jobs and services will improve and Maine will be an even better place to live and grow old if an investment in public transit is made that helps improve the quality and quantity of public transit and if the policies recommended in this report are able to be implemented. The investments and policies will help bring about a place where people can more easily remain in their homes and home towns as they “age in place” with access to the things they need to make their lives full and complete. Even after they no longer can drive their own automobile, they will still be able get out and about—to the doctor, to shop, to community activities, to visit family, to do the things they want to do to make their lives complete. Public transportation can help make this possible for more of Maine’s residents if the fiscal constraints can be overcome, along with improvements in the efficiency and effectiveness of transit providers.

Today, most Mainers don’t have the option of using public transit because of limited geographic service areas and limited service availability, but if all stakeholders, transit services, social services, economic developers, transit users and others work together, transit services can advance in all of Maine’s counties to make the above vision real by 2025.

Overarching Conceptual Framework

The Overarching Conceptual Framework, shown in *Figure 1: Overarching Conceptual Framework*, for this strategic plan is: Where are we? Where do we want to go? And finally, how do we get from where we are to where we want to go? The plan and its recommendations provide a conceptual framework for MaineDOT’s continued investment in public transportation systems in Maine through 2025. It is based on inventories, analyses and surveys undertaken as part of the work on the Maine Strategic Transit Plan 2025, as well as policy considerations aimed at making the best use of public transit dollars administered by MaineDOT.

Figure 1: Overarching Conceptual Framework



Findings

The research team, assisted by MaineDOT staff and an advisory committee of people interested in mobility for Maine’s citizens, established the following findings for the Strategic Transit Plan 2025.

There is a high need for transportation.

Maine is not only the oldest state in the nation by median age; it is also the most rural. Almost 16%, that is 15.9% of Mainers are age 65 or older and 61.3% of Mainers live in rural areas. Due in part to one of the largest concentrations of baby boomers per capita in the country, Maine’s population is also aging faster than any other state. During the past 20 years, Maine’s median age rose by almost 9 years, from 33.9 to 42.7 years of age. By 2030, it is expected that one out of every four Mainers will be over 65. Maine’s population of very old people is growing rapidly; from 1990 to 2009, the population of people age 85 and over grew by 10,000 – a 58%

increase In addition, 90% of Mainers want to remain in their homes and communities and many will need transportation options to do so.

In 2010, there were 59,913 elderly persons (28% of the state's elderly population) who lived in communities served by fixed route transit or one of the larger flex route transit systems. Seventy-two per cent (72%) of Maine's elderly live in communities without access to one of these fixed route or flex route services. The onboard passenger survey revealed that where access to fixed route service is available, the percentage of elderly passengers who used the service was greater than the percentage of elderly people in the state. This suggests that if public transportation is available, elderly persons will use it.

Similarly, passengers on fixed route public transportation in Maine had substantially lower incomes than the general population of the state. While the U.S. Census Bureau, 2008-2012 American Community Survey shows that 23.2% of Maine households have annual incomes of less than \$25,000, the onboard passenger survey revealed that 52% of fixed route passengers had an annual household income of less than \$25,000 and almost one half of the passengers on public transportation did not have a vehicle available to them at any time. .

The concept is well supported and people believe transit makes for a better place.

Mainers strongly support the availability of local bus service for all. In October and November 2013, a 68 question statewide telephone survey concerning attitudes about public transportation was conducted on behalf of MaineDOT (see Chapter 5). Responses to the survey indicated that 68% said it should be a public service like police and fire departments. And 84% agreed public bus service should be provided to people who cannot drive or do not have a car. Most Mainers agree that a local bus service is good for a community. Responding to the same survey, 81% agree that availability of a local bus service is an incentive and a good reason for people to move to an area. 77% agree that it is a reason to locate a business in a community.

More funding and increases in efficiency and effectiveness of existing transit services will be needed to support the concept of adequate public transit.

Using methodology in *Transit Cooperative Research Program (TCRP) Report 161, Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation: Final Workbook*. (Vanasse Hangen Brustlin. Washington D.C. 2013) the theoretical total demand for one way trips in Maine is 35,713,580 per year, of which 17% of this demand is currently being met. Statewide there is an annual need for more service to meet the unserved demand.

The question to address when considering the mobility needs of Mainers is: "How much transit service would be needed to more fully address the mobility needs of transit dependent persons in rural areas?" The primary methodology to answer this question used the analytical process outlined in *Transit Cooperative Research Program (TCRP) Report 161, Methods for Forecasting*

Demand and Quantifying Need for Rural Passenger Transportation: Final Workbook.

(Washington D.C. 2013.) Based on the research in TCRP report 161, meeting 20% of the need is set out as a reasonable baseline for rural services and has been adopted as the service baseline for this plan. Substantially more transit funding is required if more of the demand is to be met. To meet 20% of the theoretical demand will require \$7.4 million to \$14 million in administrative and operating costs above current funding levels each year. Status quo service levels to continue at the current 17% of need met level will require \$3 million more over 10 years plus \$95.5 million in capital replacement costs. These status quo costs assume no increase in service and a modest 1.5% annual inflation rate.

Details are shown in *Table 1: Summary of Additional Administrative and Operating Costs to Meet 20% of Transit Demand**.

Table 1: Summary of Additional Administrative and Operating Costs to Meet 20% of Transit Demand*

Summary of Additional Administrative and Operating Costs to Meet 20% of Transit Demand*					
Service Type	Trip Gap (Trips)	Lowest Trip Cost	Lowest Total Cost	Average Trip Cost	Average Total Cost
Fixed Route	730,350	\$1.82	\$1,329,237	\$3.49	\$2,548,922
Flex Route Urbanized Area	238,099	\$7.02	\$1,671,455	\$7.02	\$1,671,455
Flex Rt. Small Urban Area	164,102	\$4.12	\$676,100	\$6.59	\$1,081,433
Flex Route Rural	63,642	\$13.14	\$836,255	\$14.10	\$897,352
Demand Response Rural Co.	304,978	\$9.59	\$2,924,741	\$25.52	\$7,783,038
Total	1,501,171	\$4.95	\$7,437,788	\$9.31	\$13,982,200

*Based on FY2013 Maine transit service costs.

Recommendations

The following recommendations are offered to increase both the quantity and the efficiency and effectiveness of public transit in Maine. The recommendations are divided into groups by their relative relationship to MaineDOT goals. As a practical matter of implementation, many of the recommendations are intertwined and may be initiated simultaneously, regardless of their relative priority.

Figure 2: Recommendations**Goal 1: Manage the Existing System. Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.**

- a. Improve and Update the State Management Plan
- b. Elevate and Clarify the Message that MaineDOT’s Focus is on General Public Transportation
- c. Administer State, Federal, and Local Funding for Public Transportation
- d. Improve the Grant Decision Making Process
- e. Use Population Density of a Geographic Area to Determine Types of Service Offered
- f. Use a Demand Based Capital Priority Setting Process
- g. Establish and Use Performance Measures and provide technical assistance to increase the efficiency and effectiveness of sub-grantees.

Goal 2: Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.

- a. Support General Public Transportation Systems
- b. Support a Mix of Transit Services
- c. Support New Systems and Expand Existing Services
- d. Encourage Volunteer Networks and Alternatives to Traditional Transit Services.
- e. Provide incentives for local communities and transit providers to leverage new sources of private funding for transit services.
- f. Explore ways to Increase State and All Sources of Potential Funding for Public Transportation

Goal 3: Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

- a. Establish a Public Transportation Advisory Group
- b. Expand Education, Outreach, and Marketing
- c. Reinvigorate Provisions of Maine Revised Statutes Title 30-A, Part 2, Subpart 5, Chapter 163 Concerning Regional Transportation Corporations and Transition to Government or Quasi-governmental Governing Bodies

Summary

To continue services as they exist today and properly replace vehicles beyond their useful life would require additional annual funding of \$300,000 for administration/operations for a total of \$3 million for the 2015 to 2025 time frame and \$9.5 million in capital funds each year for the next ten years for a total of \$95.5 million for the 2015 to 2025 time period.

To expand services at the best cost levels to meet a minimal 20% of theoretical level of demand would cost an additional \$7.4 million annually and at the higher average cost it would cost \$14 million annually. For the 2015 to 2025 time period the total for expanding service and replacement of vehicles ranges between \$172 million and \$238 million. The amount of funds needed to meet the 20% level of theoretical demand could be reduced if existing transit providers could become more efficient and effective.

Sources of funds to maintain the status quo or to increase services are not apparent and will require further analysis and action by MaineDOT, the Maine State Legislature, municipalities, transit providers and other interested advocates and beneficiaries of public transit.

Maine is in the lowest quartile of states providing state funding for public transit and during the most recent reporting period for which data is available for all states, provided 40 cents per capita compared to a seven state peer group (Idaho, Montana, New Hampshire, North Dakota, Vermont, West Virginia and Wyoming) weighted average of \$2.82. If the state could find resources to increase support to the weighted average, an additional \$3.2 million per year would be available to support transit. However this would still be below what is needed to meet the minimal 20% of the theoretical trip making needs of Maine residents.

If MaineDOT implements the recommendations in this report and if additional funds as described can be identified along with improvements in the efficiency and effectiveness of the existing services, the people of Maine will find their transportation options increase with improved mobility and access. Access to Maine businesses, health care facilities and community resources will grow and many Mainers, particularly elderly Mainers and Mainers with disabilities, will find their lives enhanced.



Photograph Courtesy Connie Garber Transportation Director, York County Community Action Corp., Sanford, Maine



Photograph Courtesy of Denise Beck, Marketing Director, Metro, Portland, Maine

INTRODUCTION

For some time the assumption prevailed that if adequate streets, roads, and highways were constructed and maintained, then satisfactory levels of mobility for residents automatically would be achieved. Even with adequate roads and bridges, elderly persons, persons without cars, the low income, young people and disabled persons still have a mobility problem and often cannot access health care, jobs or other activities. The mobility problem has worsened over the last decade due to the increasing numbers of elderly people who are either unable to drive or have limited driving ability. Adding to the problem of mobility is the pattern of land use (notably “sprawl” and cul-de-sacs) and especially the development of polycentric cities (cities with more than one primary center of activity) has made provision of transit services more problematic and costly.

The critical issue of public transit service is the development of a rational service delivery mechanism and service level expectation coupled with service standards. No one has formulated a desired minimum level of mobility for individuals and there exist no universally accepted levels of service standards similar to those of postal delivery. In the early history of the United States, Congress mandated that everyone should have postal service six days a week, even though service to rural areas was not “profitable.” Despite attempts to discontinue Saturday delivery, the minimum level of six days per week service has continued. No comparable service standards have been developed for public transit. That is how often should a person living in a rural area or urban area have access to public transit? If developed, standards could then be translated into capital and operating cost estimated that would allow a rational funding scheme to develop.

The key mobility problems to be solved for the State of Maine’s future and current population, economic conditions, and social conditions revolve around service standards. What are reasonable service standards and what will be the cost to implement those standards? In addition, who will ride and who will pay?

The Maine Strategic Transit Plan 2025 is a 10-year comprehensive transit plan for the period 2015-2025 that will assist MaineDOT in answering the above questions and help in prioritizing service improvements and identifying performance measures and standards for responding to the need for transit services. The plan is a comprehensive approach to evaluating bus passenger transportation initiatives, programs, and funding sources and amounts with a particular focus on Maine’s aging population. In addition, the plan makes recommendations on transit planning and funding strategies.

Section One: Trends and Findings Impacting Public Transit

CHAPTER 1.

BACKGROUND

For more information:

Task 7: Elderly Persons Transit Needs

1.1 Introduction

The principal purpose of this chapter is to provide an understanding of public transportation, as well as introduce terminology used in the planning process.

This chapter provides a foundation to the report by examining the current state of public bus and van transportation in Maine. It highlights key demographic features of the state's population and its potential impact on future public transportation options. Similarly, the chapter describes how population density and clusters of communities further divide the larger regions into urban or rural areas, and what it means with respect to public transportation. The chapter describes the type of service connecting rural areas of the state to urban centers. Transportation designed primarily for visitors and tourists is also discussed. Lastly, a significant change is discussed which happened in August 2013. The state was required by federal mandate, the Center for Medicaid Services (CMS), to implement a new system known as "brokerage" to provide transportation for MaineCare-eligible residents to access non-emergency medical services. This change has had an impact on the nature of transit services in the state.

1.2 Maine's Changing Population

The 2012 State Plan on Aging reports that Maine is not only the state with the oldest population by median age in the nation; it is also the most rural. Citing data from the 2010 U.S. Census, the plan notes that 15.9% of Mainers are age 65 or older and 61.3% of Mainers live in rural areas. Due in part to one of the largest concentrations of baby boomers in the country, Maine's population is also aging faster than that of any other state. During the past 20 years, Maine's median age rose by almost 9 years, from 33.9 to 42.7 years of age. (Maine Office of Aging, 2012, p. 3)

Between 2006 and 2010, Maine's population of people age 65 and older grew by more than 18,000 people, from a level of 193,000 people to 211,000 people. By 2030, it is expected that one out of every four Mainers will be over 65. In addition, Maine's population of very old people

is growing rapidly. From 1990 to 2009, the population of people age 85 and over grew by 10,000 – a 58% increase. (Maine Office of Aging, 2012, p. 3)

The data suggests that a growing percentage of the state’s population will “age out” of their vehicles, no longer be able or willing to drive, with many of the older residents having one or more disabilities, resulting in a greater need for alternate forms of transportation. Many older adults will be unable to relocate from rural areas to access services and will often need transportation options to stay in their homes. In addition, 90% of Mainers want to remain in their homes and communities and do not want to relocate.

There are several gender challenges facing Maine. In 2010, of the nearly 63,000 Maine adults 65 or over who lived alone, 71% were women. Moreover, more than 72% of those 85 and over were women. Looking at the Boomer demographic, it is likely that the female-to-male ratio will increase significantly over time. Older women living alone can face unique challenges, particularly if they lived in traditional households where men physically maintained the home, handled the finances, and drove the family car. (Maine Office of Aging, 2012, p.4)

The *State Plan on Aging* also noted that transportation is a critical support for people in rural Maine as evidenced by a needs assessment undertaken as part of the plan. The statewide survey indicated that 83% of the residents over 65 assessed themselves as completely independent in relation to transportation. This number dips to 79% for people whose income is under \$30,000. (Maine Office of Aging, 2012, p.4)

In focus groups conducted in developing the *State Plan on Aging*, participants indicated a preference for public transportation over privately run volunteer programs. (Maine Office of Aging and Disability Services and Maine Department of Health and Human Services. *State Plan on Aging*, pages 3 & 14.) Just as public accommodations for people with disabilities (such as elevators, audible crosswalk signals, and wheelchair ramps on buses) have benefits to others, so too can solutions for the elderly benefit all age groups. Developing solutions to existing and future mobility problems is critical not just for the elderly, but also for all age groups that may not have access to an automobile or other vehicle, or may simply choose to use modes other than the automobile.

1.3 2010 Census Overview of Elderly Age 65 and Older

The 2010 U.S. Census documented that there are 211,080 people in Maine who are 65 years or older, and hence defined as elderly, which is 15.9% of the State’s total 2010 population of 1,328,361. However, the elderly are not evenly distributed, with the result that some counties

have a greater percentage of elderly than others. *Table 1: Distribution of Maine's Elderly Population 2010*, provides a summary of the disparities.

Table 1: Distribution of Maine's Elderly Population 2010

Distribution of Maine's Elderly Population 2010					
County	Population	# 65 +	% of County	% of State	Median Age
Androscoggin	107,702	15,184	14.1	7.2	39.8
Aroostook	71,870	13,651	19.0	6.5	45.3
Cumberland	281,674	40,157	14.3	19.0	41
Franklin	30,768	5,160	16.8	2.4	43.4
Hancock	54,418	9,937	18.3	4.7	46.3
Kennebec	122,151	18,960	15.5	9.0	42.8
Knox	39,736	7,594	19.1	3.6	46.2
Lincoln	34,457	7,393	21.5	3.5	48.1
Oxford	57,833	9,843	17.0	4.7	44.6
Penobscot	153,923	22,253	14.5	10.5	39.9
Piscataquis	17,535	3,564	20.3	1.7	48.1
Sagadahoc	35,293	5,788	16.4	2.7	44.1
Somerset	52,228	8,537	16.3	4.0	43.6
Waldo	38,786	6,280	16.2	3.0	44.1
Washington	32,856	6,426	19.6	3.0	46.1
York	197,131	30,353	15.4	14.4	43
Maine	1,328,361	211,080	15.9	100	42.7

(United States Census Bureau)

The table above shows that Maine's median age is 42.7 years, but there is considerable variation among the counties. Lincoln and Piscataquis Counties are the oldest counties (median age 48.1 years in both counties). All of the state's counties exceed the state's median age except

Androscoggin (39.8), Cumberland (41) and Penobscot (39.9), which are coincident with the state's fixed route urban systems..

1.4 Availability of Transit for Elderly

Since transportation is vital for life support activities, it is important to assess the extent of transportation currently available and contrast it with where the elderly live. While all of Maine receives some transit service, the most comprehensive services are the fixed route transit systems and the larger flex route systems in more urbanized areas. *Appendix A: Availability of Transit for Elderly – Fixed Route and Large Flex Route Systems* shows the names of the transit systems, the communities served, number of persons 65 and over, and the median age of the community.

The table shows that in 2010, there were 59,913 elderly persons (28% of the state's elderly population) who lived in communities served by fixed route transit or one of the larger flex route transit systems. Conversely, 72% of Maine's elderly live in communities without access to one of the communities with more comprehensive fixed or flex route services. This indicates the need to enhance transit services in more rural areas if older persons are to have adequate mobility.

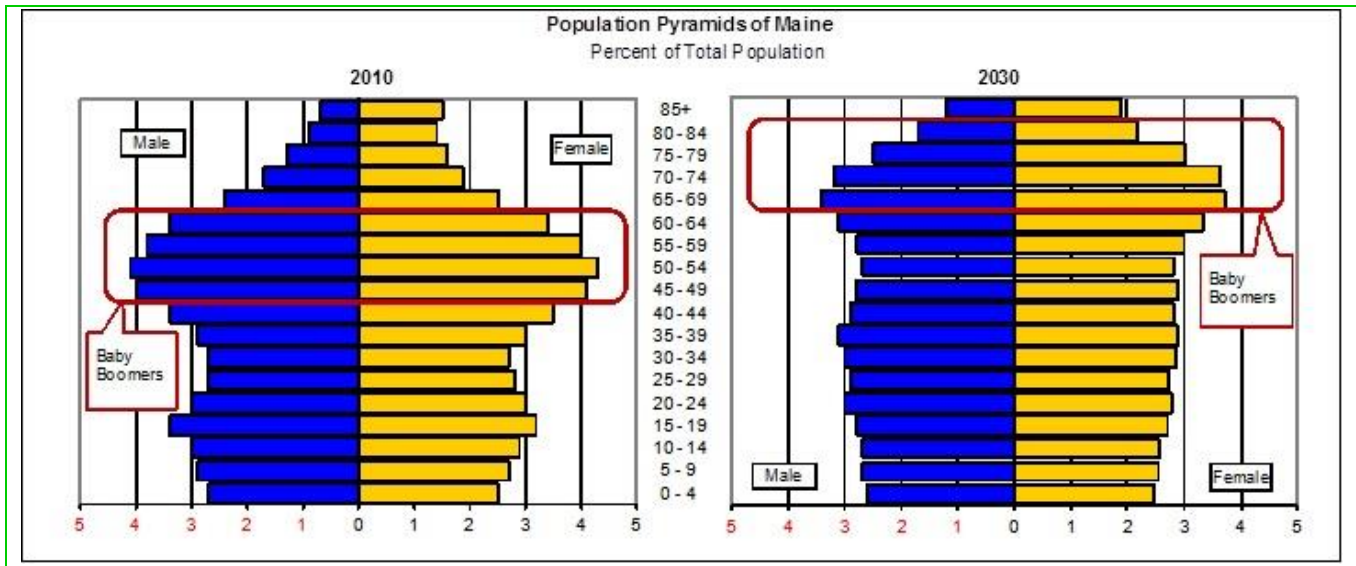
1.5 Maine's Population Outlook to 2025

Maine has the oldest median age in the country – 42.7 years in 2010. Maine also has the highest percentage of non-Hispanic white residents (94.4%). Maine is tied with Vermont for the smallest percentage of residents under 18 years of age (20.7%). These factors all combine to give Maine a rapidly aging population and slow population growth. There are several key reasons for the aging and slow-growing population: the Baby Boom generation, low birth rates, and low rates of in-migration. (U.S. Census 2010)

The Baby Boom generation, born between 1946 and 1964, made up 29.4% of Maine's population in 2010, when its members were between the ages of 46 and 64. This is a higher percentage than any other state – Vermont was second at 29.3% and New Hampshire was third at 29.0%. Nationally, around 25% of the population is part of the Baby Boom generation. (U.S. Census 2010)

The role of the baby boom generation on the composition of Maine's population can be seen in the two population pyramids shown in *Figure 1: Maine's Population by Age Group*. In 2010, the baby boom generation occupies the age groups between 45 and 64 years. By 2030, this age cohort is expected to occupy the top layers of the pyramid.

Figure 1: Maine's Population by Age Group



Source: Maine Office of Policy and Management

Population Projections. Maine's Office of Policy and Management has prepared population projections for counties. Populations are projected for 2015 through 2030 in five-year intervals and will be updated every two years. County-level projections are given for five-year age cohorts by sex. This demographic detail can be especially useful as the population ages. Some counties will be faced with an older population sooner than other counties, and these projections can help identify those faster-aging regions. Town-level projections are currently only available for the total population.

The county-level model assumes that past birth, death and migration rates within each cohort will persist into the foreseeable future. The model used by the Office of Policy and Management cannot account for unprecedented future events that may dramatically alter a county's demographic composition, such as future military base closings; large factory openings and closures; or changes in technologies, personal choices, or environmental conditions in the next 20 years that may alter migration behavior or birth and death rates. As such, population projections are more accurate for the near future than distant years and should be updated regularly.

Due to recent population trends, the projections show most counties declining in population over the next two decades. Only four counties are projected to see population increase between 2010 and 2015: Androscoggin, Cumberland, Knox, and York. By 2030, these four counties, plus Penobscot, which begins seeing population growth following 2015, are the only ones projected to experience population growth compared to 2010.

When the counties are aggregated to a statewide level, Maine is projected to grow through 2020, after which point the population is expected to decline. As discussed earlier, these projections are highly dependent on current life expectancy and migration rates. Increases in life expectancy and in-migration could result in higher population counts in the future.

Total Population Projections by County. *Appendix B: Population Projections* shows that Maine’s population will remain relatively constant during the period 2015 through 2025, with modest increases in Androscoggin, Cumberland, Knox, Penobscot and York Counties, and minor declines in the remainder of the counties.

Population Projections – Maine’s Elderly. While Maine’s overall population growth during the period 2015 – 2025 is expected to remain flat, Maine’s population of people 65 years and over is projected to grow from 248,358 in 2015 to 326,320 by 2025, an increase of 77,962 people or 31%. The population of people 65 and over is expected to increase in every county, as shown in *Table 2: Growth of Maine’s Elderly Population 2015 to 2025*.

Table 2: Growth of Maine's Elderly Population 2015 to 2025

Growth of Maine's Elderly Population 2015 to 2025					
County	Population In 2010	Population In 2015	Population In 2025	# Change 2015-2025	% Change 2015-2025
Androscoggin	15,184	17,322	22,169	4,847	28.0%
Aroostook	13,651	15,371	18,599	3,228	21.0%
Cumberland	40,157	47,635	65,838	18,203	38.2%
Franklin	5,160	6,015	7,765	1,750	29.1%
Hancock	9,937	11,835	14,970	3,135	26.5%
Kennebec	18,960	21,939	28,645	6,706	30.6%
Knox	7,594	9,069	11,765	2,696	29.7%
Lincoln	7,393	8,877	10,844	1,967	22.2%
Oxford	9,843	11,204	14,417	3,213	28.7%
Penobscot	22,253	25,635	33,674	8,039	31.4%
Piscataquis	3,564	4,194	5,130	936	22.3%
Sagadahoc	5,788	7,019	9,406	2,387	34.0%
Somerset	8,537	10,025	12,842	2,817	28.1%
Waldo	6,280	7,868	10,409	2,541	32.3%
Washington	6,426	7,489	9,019	1,530	20.4%
York	30,353	36,860	50,832	13,972	38.0%
Maine	211,080	248,358	326,320	77,962	31.0%

(U.S. Census 2010 and Maine Office of Policy and Management)

Table 2 shows that all counties will experience an increase of at least 20% in the number of people 65 and over during the period 2015 through 2025. Maine's two most populated counties are expected to experience the greatest increases. Cumberland County's 65 and over population is projected to grow by 18,203 people, or 38.2%, and York County's 65 and over population is projected to grow by 13,972 people, or 38.0%.

1.6 Summary of Chapter 1

This chapter provides a basic foundation to the report by examining the current state of public transportation in Maine. It highlights key demographic features of the state's population and their potential impact on future public transportation options. Major points of the chapter are:

- Maine is not only the state with the oldest population by median age in the nation; it is also the most rural.
- Maine's population is also aging faster than that of any other state.
- Ninety percent (90%) of Mainers want to remain in their homes and communities and do not want to relocate.
- Eighty-three percent (83%) of the residents over 65 assessed themselves as completely independent in relation to transportation. This number dips to 79% for people whose income is under \$30,000.
- Seventy-two percent (72%) of Maine's elderly live in communities without access to fixed route transit or one of the larger flex route transit systems.

The next chapter examines MaineDOT's traditional funding support of public transit and shows how the funding has addressed the current population through the development of an array of public transit providers.

CHAPTER 2.

MAINEDOT'S FUNDING SUPPORT FOR TRANSIT AND SERVICE INVENTORY

For more information:

Task 8: Provider Assessment and Tasks 9&13: Funding, Budget, and Program Assessment

2.1 Introduction

Chapter 2 is “Transit in Maine 101,” and provides a baseline of information about public transportation in the state. It includes an overview of traditional funding over the last 20 years, as well as how geographic regions were established to administer the funds.

2.2 MaineDOT's Traditional Funding Support for Transit

For over 30 years MaineDOT has used funds from the State Legislature and the Federal Transit Administration (FTA) to provide capital and operating funds to support a wide variety of transit systems. These systems include fixed route transit serving rural and urbanized areas, intercity transit systems, demand response systems, flex route systems with route deviation, seasonal transit systems and several ferry systems.

Federal Funding. The Federal Transit Administration (FTA) provides financial support for transit systems through a variety of funding programs that are administered by MaineDOT. The state's urbanized transit providers are direct recipients of Section 5307 funds as described below. The basic programs described below were in effect prior to October 1, 2012. Beginning in October 2012, 49 USC Sections 5316 (Job Access, Reverse Commute, rural and urban) were incorporated into the 5311 and 5307 programs, respectively, and the New Freedom Program (Section 5317) was folded into the Section 5310 program.

FTA programs (as they existed prior to October 1, 2012) are described below. The older descriptions are used so that FY 2012 funds can be displayed by program in *Table 5: Federal Financial Support from FTA to Services and Activities in Maine FY 2012*.

§5303 Planning Program: provides funds for metropolitan transit planning purposes.

§5304 State Planning Program: provides funds for state transit planning purposes.

§5307 Urbanized Area Formula Grants: The largest of FTA's programs, this program provides grants to urbanized areas to support public transportation. An urbanized area is an area with a population of 50,000 or more that has been defined and designated in the

most recent decennial census as an “urbanized area” by the Census Bureau. The 5307 program provides funds for operating and capital expenses.

§5310 Elderly, Persons with disabilities (after October 12, 2012, called the Enhanced Mobility of Seniors and Individuals with Disabilities). This program provides formula funding to increase the mobility of seniors and persons with disabilities. Under this program, funds must be spent on capital projects designed to meet the needs of seniors and persons with disabilities when public transportation is insufficient, inappropriate or unavailable, or where projects will improve access to fixed route services and decrease reliance by individuals on complementary paratransit services.

§5311 Non-Urbanized Formula Program (after October 1, 2012, called the Rural Program). This program provides operating, capital and administrative funding for rural public transit systems that operate in areas with populations of less than 50,000. Not less than 15% of the funds must be spent on intercity bus transportation. The 5311(b) RTAP (Rural Transportation Assistance Program) program provides training funds for use by transit providers and Native American Tribes.

§5316 Job Access Reverse Commute (JARC) Program (after October 1, 2012, folded into the 5307 and 5311 programs). This program provides funding for job access and reverse commute services to low income individuals who may live in the city core and work in suburban locations or anywhere that low income individuals live at a distance from available entry level jobs.

§5317 New Freedom Program (after October 1, 2012, folded into the 5310 program). This program provides funding to address the transportation needs of persons that go beyond those required by the Americans with Disabilities Act. Funds are distributed by a competitive process.

Table 3: Federal Financial Support from FTA to Services and Activities in Maine FY 2012 provides a summary of Federal Transit Administration financial support for FY 2012.

Table 3: Federal Financial Support from FTA to Services and Activities in Maine FY 2012

Federal Financial Support from FTA to Services and Activities in Maine FY 2012		
FTA Program	Program Name	FY 2012 Funding Amount
§5303	Planning Program	\$374,538
§5304	State Planning Program	\$98,570
§5307	Urban	\$4,162,847
§5310	Elderly, Persons with Disabilities	\$741,596
§5311	Non-Urbanized Formula (Rural)	\$5,434,988
§5311(b)	RTAP	\$115,593
§5316	Job Access, Reverse Commute, Rural	\$340,467
§5316	Job Access, Reverse Commute, Urban	\$311,805
§5317	New Freedom, Rural	\$217,097
§5317	New Freedom, Urban	\$221,882
	Small Transit Intensive Cities	\$263,030
Total		\$12,282,413

(Maine Department of Transportation, “Federal Allocation for FY 2012,” 19 July 2012, n.p.)

The table above shows that FTA provided a little over \$12 million to support Maine’s transit systems, but the bulk of the support, 78%, is for two programs: §5307 Urban (\$4.1 million); and §5311 Rural (\$5.4 million).

State Funding. The State of Maine also provides financial support for public transit programs, but the amounts are much smaller. Based on information obtained from the Maine Department of Transportation, State of Maine funding support for FY 2011, FY 2012, and FY 2013 was:

- FY 2011: \$530,026
- FY 2012: \$547,845
- FY 2013: \$547,845

As another means of comparison, in 2010 the state contributed \$530,026 to public transportation, ranking Maine 43rd out of the 45 states (five states provide no funding) and the District of Columbia in terms of total dollars invested in public transportation. It is important to see that the state is similarly ranked in terms of per capita spending, where Maine ranked 42nd.

Table 4: *State per Capita Transit Funding FY 2012* provides a sample of other states and their per capita spending in 2010. Had Maine been closer to the median of all states in per capita spending, it would have invested almost \$8.8M or \$6.62 per capita in public transportation that year. (American Association of State Highway and Transportation Officials 1-15)

Table 4: State per Capita Transit Funding FY 2012

State Per Capita Transit Funding FY 2012	
Jurisdiction	Per Capita Dollar Support
Massachusetts	\$183.22
Connecticut	\$115.01
Oregon	\$34.17
Vermont	\$10.92
Iowa	\$4.16
West Virginia	\$1.50
Mississippi	\$0.54
Maine	\$0.40
New Hampshire	\$0.32
50 State National Average (as of 2007)	\$45.66

(AASHTO, Sources of State Funding for Public Transportation, Washington, D.C., 2013, n.p. and AASHTO, Sources of State Funding for Public Transportation, Washington, D.C., 2010, n.p.)

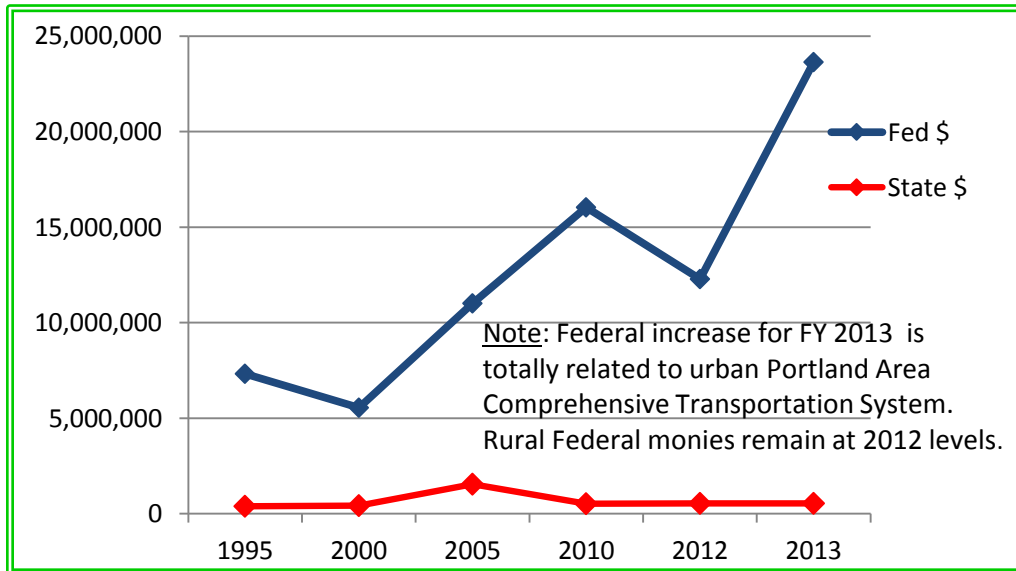
The table above shows that Maine’s FY 2012 per capita financial support for transit (\$0.40) is below the national average (\$45.66), and is also less than that of Vermont (\$10.92), but more than that of New Hampshire (\$0.32).

The impact of public transit on the lives of elderly persons is a critical element of the Strategic Transit Plan. West Virginia has the greatest percentage (22.9%) of elderly persons among the states in Table 6; Maine closely follows in second place with only 0.3% fewer (22.6%), and Vermont follows with 21.1%. West Virginia, with a comparable percentage of elderly persons as Maine, spends almost four times the amount per capita on public transit as does Maine (\$1.55 and 40¢ respectively). Vermont, with 21.1% elderly persons, spends \$10.17 per capita on public transit. The *State Plan on Aging October 1, 2012 – September 30, 2016*, highlighted transportation as a critical element in elderly persons’ ability to age in their communities and not

become isolated or depressed because they could not travel away from their homes. In addition, public transportation seemed to be a preferred option to seniors in Maine over volunteer programs. (Maine Office of Aging and Disability Services and Maine Department of Health and Human Services, 2012, page 14)

Federal and State Financial Support for Transit over Time. *Figure 2: FTA and State of Maine Dollars Invested in Public Transportation* provides a snapshot of FTA and state funding for public transit since 1995. In FY 2012, for example, state funding for general public transit included \$547,845 (nearly the same amount as it has been for the past 25 years), and \$12,282,413 from the Federal Transit Administration (FTA). (Maine Department of Transportation n.p.). One of the fundamental stipulations underlying the use of \$4,176,714 in FTA Section 5311 funds (rural area formula grants) is that FTA-funded vehicles must be open to the general public.

Figure 2: FTA and State of Maine Dollars Invested in Public Transportation



The figure above shows that federal funds for transit have generally increased over time, but state funds have not. Flat state funding has reduced the state’s ability to help providers meet federal matching fund requirements.

Local Funding for Transit. *Appendix C: Local Municipal Financial Support for Transit Systems FY 2012* provides an overview of local municipal funding support for public transit systems for FY 2012. In general, there is substantial local municipal financial support for the state’s fixed route transit systems (no route deviation, but complementary paratransit service for those unable to access the bus) and this is exemplified by the \$3,030,873 in local funding for the Portland METRO transit service. There is also local municipal financial support for flex route systems (no complementary paratransit service, but route deviation to pick someone up who cannot get to the regular route). However, there is little local funding support for rural transit systems that

operate in most of Maine outside of the urban areas. Only one region out of the eight regional transit providers reported any local revenue support of \$16,618. The other seven regions reported no local revenue support. Rural transportation systems have relied heavily on MaineCare funds to meet federal matching fund requirements.

2.3 Maine's Geographic Regions for State-Administered Transportation Funds

To administer and distribute state and federal public transportation funds described in the preceding section, MaineDOT is required by state law, Title 23 M.R.S.A. Section 4209, to divide the state into geographic regions. *Figure 3: Maine's Eight Transit Regions* identifies the eight geographic regions, which in some cases, are not coincident with county boundary lines.

The regions are further divided, by population, into rural or urban areas. These areas are important because they are the principal eligibility determinant for a variety of grants. Within each of the geographic regions, a regional public transportation agency is designated to develop a locally coordinated public transportation plan for the region. Urbanized areas and small urban areas, fall within the geographic boundaries of the eight transit regions, and are part of the locally coordinated plans. The demand response agencies within the urbanized and small urban areas provide service in those areas. However, it is important to note that throughout the preparation of this plan urban areas as defined by the FTA (over 50,000 population) are not part of the rural area discussions and are considered separately with their own discreet urban funding sources.

There are ten FTA-Section 5311 supported rural transit systems in Maine which collectively provided 2.7 million passenger trips in FY 2012, exclusive of the fixed route and flex route systems some of which are operated by some of the rural transit providers. By Maine state law, Title 23 M.R.S.A. Section 4209, MaineDOT is required to divide Maine into geographic regions, and has subsequently designated eight transit regions and nine regional transit providers. There is one additional regional provider, Waldo Community Action Partners, in Region 5 and also one additional service provider, Community Concepts, in Region 7. *Table 5: Regional Transit Providers* shows the region, the regional transit provider, and the county and towns served as well as their organization type and governance.

Appendix D: How Maine's Transit Providers are Governed Now shows the governing bodies of Maine's transit providers. As shown in Appendix D only two of the regional providers are organized as single purpose transit organizations. The other regional providers are organized as multi-purpose not for profits organizations and transit is just one of many services they provide. The fixed route services in the state as well as the Bath flex route system are organized under municipal governmental rules. There are also two private for profit organizations that provide transit services as a sub-recipient to MaineDOT.

Figure 3: Maine's Eight Transit Regions

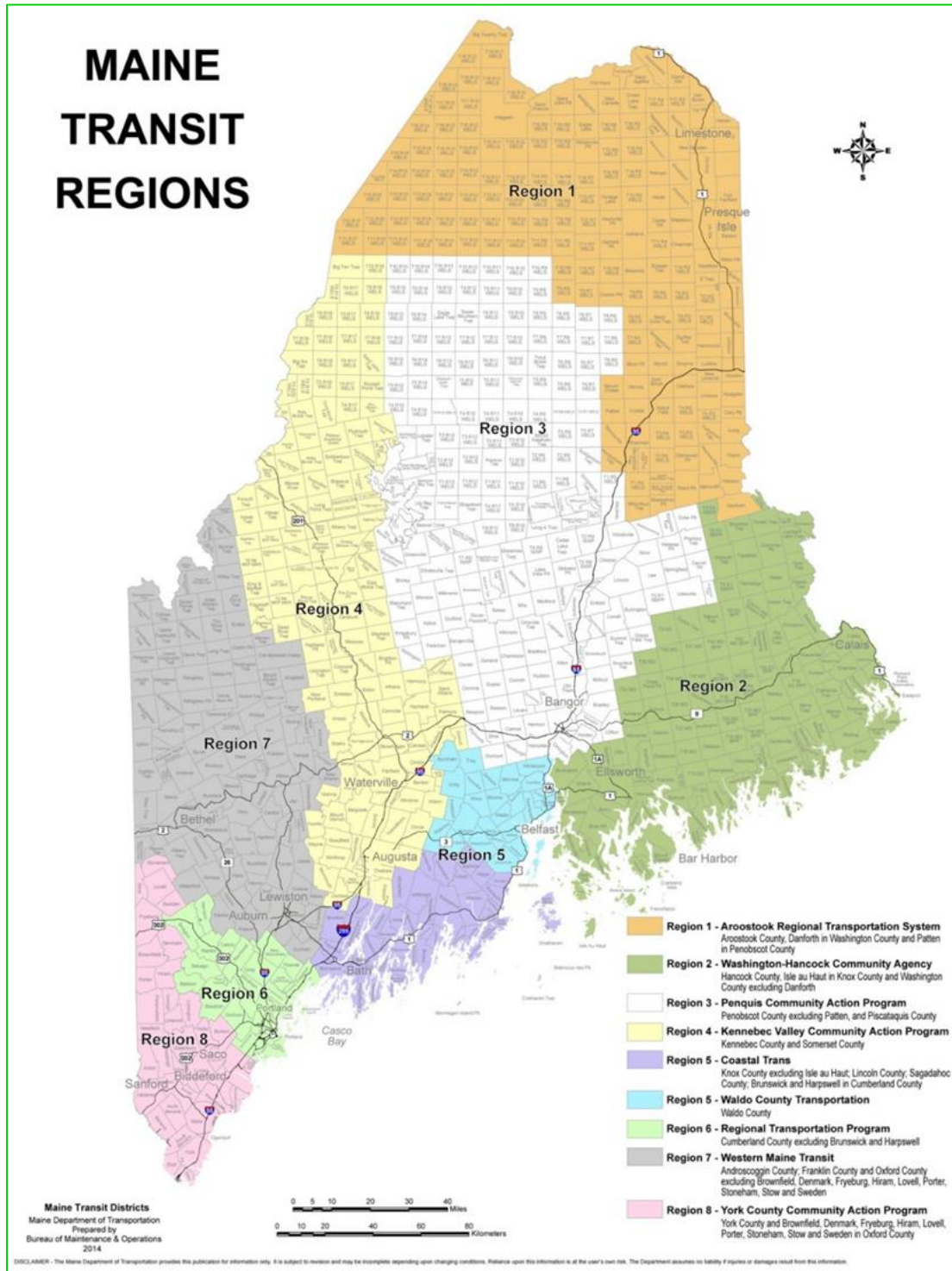


Table 5: Regional Transit Providers

Regional Transit Providers		
Region	Regional Transit Provider and Governance	County and Town
1	Aroostook Regional Transportation System (ARTS) organized as a private not for profit transit service with a board of directors.	Aroostook and the town of Patten in Penobscot County and Danforth in Washington County
2	Washington Hancock Community Agency (WHCA) organized as a multi-purpose private not for profit with a board of directors	Hancock and Washington exclusive of Danforth
3	Penquis Transportation Program (Penquis) organized as a multi-purpose private not for profit with a board of directors	Penobscot exclusive of Patten and Piscataquis
4	Kennebec Valley Community Action Program (KVCAP) organized as a multi-purpose private not for profit with a board of directors	Kennebec and Somerset
5	Coastal Trans, Inc. (CTI) organized as a private not for profit with a board of directors	Knox, Lincoln, Sagadahoc and the towns of Brunswick and Harpswell in Cumberland County
	Waldo Community Action Partners (WCAP) organized as a multi-purpose private not for profit with a board of directors	Waldo
6	Regional Transportation Program (RTP) organized as a private not for profit transit service with a board of directors.	Cumberland exclusive of Harpswell and Brunswick
7	Western Maine Transportation Program (WMTS) organized as a private not for profit transit service with a board of directors.	Androscoggin, Franklin, Oxford exclusive of Porter, Hiram, Brownfield, Denmark, Sweden, Fryeburg, Lovell, Stow and Stoneham
	Community Concepts organized as a multi-purpose private not for profit with a board of directors	Androscoggin, Franklin, Oxford exclusive of Porter, Hiram, Brownfield, Denmark, Sweden, Fryeburg, Lovell, Stow and Stoneham
8	York County Community Action Corporation (YCCAC) organized as a multi-purpose private not for profit with a board of directors	York plus the Oxford County towns of Porter, Hiram, Brownfield, Denmark, Sweden, Fryeburg, Lovell, Stow and Stoneham

2.4 Determination of Urban or Rural Area

The U. S. Census Bureau has a methodology that establishes clear geographic boundaries for urbanized areas (UZAs) based on population. An urbanized area is one in which the total population of the area contains 50,000 or more people. The starting point for UZA boundaries are census tracts and not municipal boundaries. A UZA may include one or more incorporated cities, towns, or villages, or parts of them.

For public transportation, the **urbanized areas** (and conversely the areas left that are non-urban; that is, rural) are important because the FTA and Federal Highway Administration (FHWA) use them in establishing eligibility for grant programs. For example, FTA Section 5307 funds – Urbanized Area Formula Grants – can only be used in urbanized areas. Conversely, FTA Section 5311 funds – Rural Area Formula Grants – can only be used in rural areas. Some FTA and FHWA grant programs can be used in either urbanized areas or rural areas.

In addition, the Census Bureau and FHWA (although not the FTA) also have definitions for concentrated populations in areas smaller than 50,000; however, they use different terminology and population ranges. For consistency with other federal and MaineDOT programs, it is best to align with the FHWA definitions. For this study and its implementation, small urban areas are Census Bureau-designated areas of population 5,000 and greater, not within a UZA. For public transportation purposes, small urban areas fall under the funding eligibility criteria for rural programs.

Section 5307 Urban Program. This program makes Federal resources available to urbanized areas and to Governors for transit capital and operating assistance in urbanized areas and for transit related planning. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Department of Commerce, Bureau of the Census. Eligible purposes include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; operating assistance, capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guide way systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.

All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs. For urbanized areas with a population of 200,000 and over, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive Federal funds. For urbanized areas under 200,000 in population, the funds are apportioned to the Governor of each state for distribution. Maine has the option of §5307 grants

between 50,000 and 199,999 populations that may apply directly to FTA or through MaineDOT. (MaineDOT, 2014, p. 3) This means that for eligible §5307 projects in small urban areas with a population between 50,000 and 199,999, Maine has the option of either having the recipient apply directly to the FTA, or go through MaineDOT as a subrecipient and has chosen to have recipients apply directly to FTA. Only public entities are eligible to receive §5307 funds. (Rothe, 8 May, 2014, Telecommunication)

In 2012 four public transit operators became direct recipients and a letter of concurrence from the Governor was required. Based on the results of the 2010 Census, the population of the Portland area now exceeds the 200,000 population threshold for designation as an Transportation Management Area (TMA) (MaineDOT, 2014, page 21) Two non-profit agencies, York County Community Action Corporation and the Regional Transportation Program, remained subrecipients to the MaineDOT. (MaineDOT, 2014, p. 3). All projects must be included in MaineDOT's STIP (Statewide Transportation Improvement Program), and TMA transit agencies must coordinate distribution of §5307 funds via split letter. (MaineDOT, 2014, p. 21)

Section 5311 Rural Program. MaineDOT is a direct recipient and manager of the §5311 rural program. (Rothe, 8 May 2014, Telecommunication) FTA defines the goals of the §5311 program, in *Circular 9040.1F* "to enhance the access of people in rural areas to health care, shopping, education, employment, public services, and recreation; assist in the maintenance, development, improvement, and use of public transportation systems in rural areas; encourage and facilitate the most efficient use of all transportation funds used to provide passenger transportation in rural areas through the coordination of programs and services; assist in training, assist in the development and support of intercity bus transportation; and provide for the participation of private transportation providers in rural transportation."

Maine is divided into eight transit regions defined generally along county lines. Within those regions, a distribution formula is used which includes the three factors of population, road mileage and square miles. Projects are identified through the Locally Coordinated Plan (LCP). The Bureau of Planning's Multimodal Planning Division conducts a series of public meetings as part of the LCP planning process and solicits service ideas and information on gaps through that process. The projects strive to be geographically and demographically diverse and meet the needs of all Maine's citizens, businesses and visitors. As required by FTA, MaineDOT also publishes legal notices announcing its grant programs and invites inquiries and applications from the public and interested transportation providers. (MaineDOT, 2014, p. 4)

The following entities are eligible to receive §5311 capital and operating grant funds and (for the intercity bus program only) purchase of service agreements:

- State agencies.
- Local governmental agencies and their authorities.

- Indian Tribal governments.
- Private non-profit organizations.
- Operators of public transportation services or intercity bus service providers that receive FTA grant funds directly through the state or a sub-recipient.
- Private intercity bus operators (§5311(f) intercity bus program only to include bus service for the general public that:
 - Operates with limited stops over fixed routes connecting two or more “urban areas” not in close proximity; and
 - Has the capacity for transporting baggage carried by passengers; and
 - Makes meaningful connections with scheduled intercity bus service to more distant points, if such service is available.
- Private for-profit operators of transit or paratransit services may participate in the §5311 program as contractors for the state or grantees but not as sub-recipients. Private for profit companies may contract directly with the state for intercity services. State agencies do not define 49 USC §5311 recipient eligibility requirements further than those stated above. (MaineDOT, 2014, p. 15)

In general, transit projects funded by MaineDOT are funded in part by formula grants and need. In all cases, MaineDOT requires that providers submit an application for funding. Following submission of an application or applications to MaineDOT, the Bureau of Planning takes the following steps:

- Review projects to determine eligibility
- Identify projects funded by formula
- Prioritize non-formula projects aimed at meeting identified transit needs;
- Prepare a Program of Projects based on available funding as determined from the Federal Register (MaineDOT, 2014, p. 21)

2.5 Public Transportation in Urbanized Areas (UZAs)

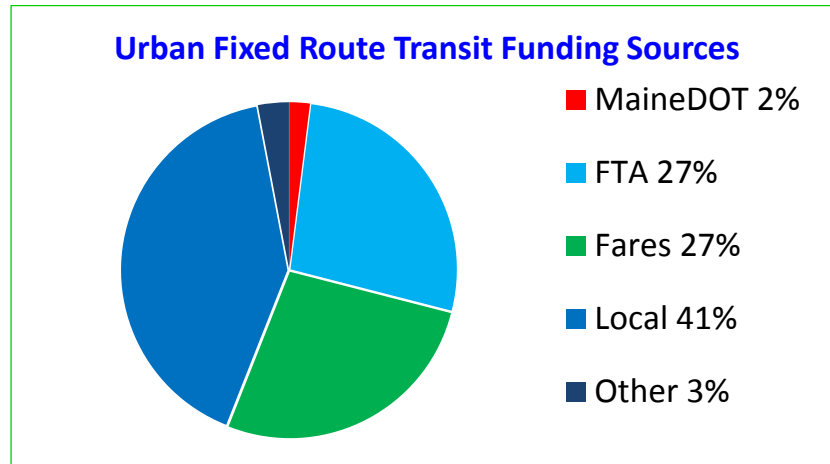
Maine has designated urbanized areas in Portland, Bangor, and Lewiston. Maine also overlaps into two small UZAs with New Hampshire in York County. Because Portland's population exceeds 200,000 it is also a designated Transportation Management Area (TMA). Again, the UZA boundaries may include all, or part of, many municipalities. For example, the Bangor UZA has a population from the 2010 census of 61,210. It is made up of the Cities of Bangor, Brewer, Town of Veazie, and parts of Town of Hampden, City of Old Town, Towns of Orono, Bradley, Eddington, Milford, Orrington, and the Penobscot Indian Nation.

In addition, UZAs must have an organization designated by federal and state government to carry out transportation planning. These are called Metropolitan Planning Organizations (MPOs). MPOs in other areas include the Kittery Area Comprehensive Transportation System (KACTS), the Portland Area Transportation System (PACTS), the Bangor area is BACTS (Bangor Area Comprehensive Transportation System), and the Androscoggin Transportation Resource Center (ATRC).

The urbanized areas have the most extensive public transportation systems in Maine. All of the Maine UZAs have fixed route bus service, that is, buses open to the general public operating on a repetitive, fixed route and fixed schedule, stopping to pick up and discharge passengers at designated bus stops except for Community Connector in Bangor which allows flag stops. (This is the type of public transit service that most people associate with the concept of a city bus service.) The level of service varies in each of the urbanized areas; there are different hours of operation, areas covered, and frequency of service. Similarly, the level of service and financial participation by the municipalities within the UZAs also varies widely; some municipalities within an UZA are not served at all.

Funding for fixed route service is largely supported by municipal contributions, FTA grants, and passenger fares. Portland, Bangor, Lewiston/Auburn, South Portland had total funding expenditures of \$11.6 million in fiscal year 2012 to operate the four largest fixed route systems in the state. *Figure 4: Percentage of Transit Funding by Funding Source in FY2012*

Figure 4: Percentage of Transit Funding by Funding Source in FY2012 For Portland, Bangor, Lewiston/Auburn, South Portland



The urbanized areas are also served by intercity bus service, private charter services, taxis, transportation brokers of MaineCare transportation, non-profit organizations, and individuals that provide demand response transportation service for the social service and other purposes. Demand response services are directed primarily to serve the elderly, persons with disabilities, or other persons eligible for sponsored transportation. Demand response service is typically delivered using passenger cars, vans or small buses operating in response to calls from passengers to a transportation coordinator, who then schedules and dispatches a vehicle to pick up the passengers and transport them to their destination. On August 1, 2013, this changed for MaineCare passengers due to the mandate from the Center for Medicaid Services. The vehicles do not usually operate over a fixed route or on a fixed schedule but they generally have a limited geographic area of service. In addition, the vehicle may be dispatched to pick up several passengers at different pick-up points before taking them to their respective destinations.

Like fixed route service, demand response service in the urbanized areas is more extensive than in rural areas of the state. Until August 2013, demand response service in urban areas was coordinated by the eight regional transportation providers. The changing framework for providing demand response service that applies in both urban and rural areas statewide is described below in *Section 2.10 MaineCare Brokerage System*.

It is important to note that the practice of allowing the general public to ride on demand response coordinated trips was a critical factor regarding MaineDOT’s past policies and funding (primarily capital) for demand response transportation directed to social service programs. However as revealed in the telephone survey conducted as part of this plan, 67% of Mainers did not know the name of their local bus system. (Mildner 35) Furthermore, it can be stated that many members of the general public do not know that they could access either urban or rural demand response trips. Anecdotally it is common for many Mainers to believe that public transportation

is “non-existent” where they live, or state that “Those buses are for the elderly or some other group,” oblivious of the fact that they could access the service if they are willing to agree to the service parameters of time of day, route and price. (Steering Committee group exercise: Identifying Core Beliefs) This is true within the urban areas described in this section, and the rural areas described in the next section.

2.6 Public Transportation in Rural Areas

In rural regions of the state, public transportation systems changed over the years. Some were a department within a multi-purpose, large non-profit organization; others started as transportation-specific agencies. These organizations and agencies served a variety of transportation needs for a wide range of organizations and individuals, but focused on “sponsored” or agency related social service trips. Ten public transportation providers operated in the eight transit regions. Together, they provided a coordinated transit network within their regions using agency vehicles and, under the MaineCare program, volunteers in the Friends and Family Program. Many of the agency vehicles were funded in whole or in part with either MaineDOT and/or FTA capital funds. For MaineCare individuals traveling to non-emergency medical appointments, people who participated in either the Friends and Family program or the volunteer program received reimbursement from the regional provider at separate rates established by DHHS.

When using agency vehicles, and sometimes when using volunteers, the regional transportation providers were able to achieve efficiencies by commingling individuals whose trips were paid by different funding sources. This method of trip coordination leveraged all sources of funds to maximize transportation options for everyone. *Figure 5: Funding Sources (Total of \$43.4 Million) for Ten Maine Regional Transportation Providers in FY12* shows the sources of funding in FY 2012 that were used for administration, operations, and capital expenditures. MaineCare provided 80% of the funding in FY 2012. (\$34.9 million out of a total of \$43.4 million). Moreover, 86% of the trips provided by the 10 regional providers (2.7 million trips in FY 2012) were MaineCare eligible trips.

Figure 5: Funding Sources (Total of \$43.4 Million) for Ten Maine Regional Transportation Providers in FY12

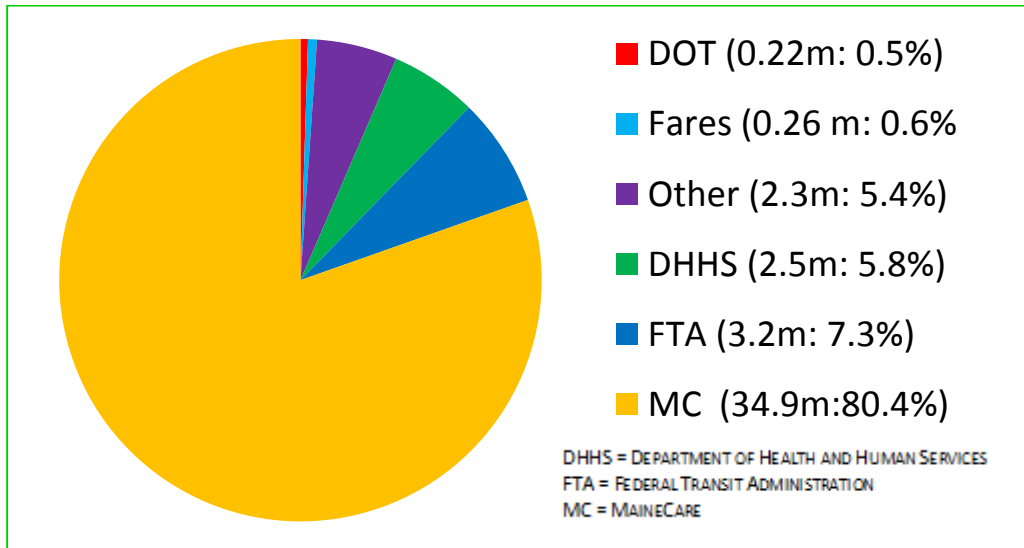
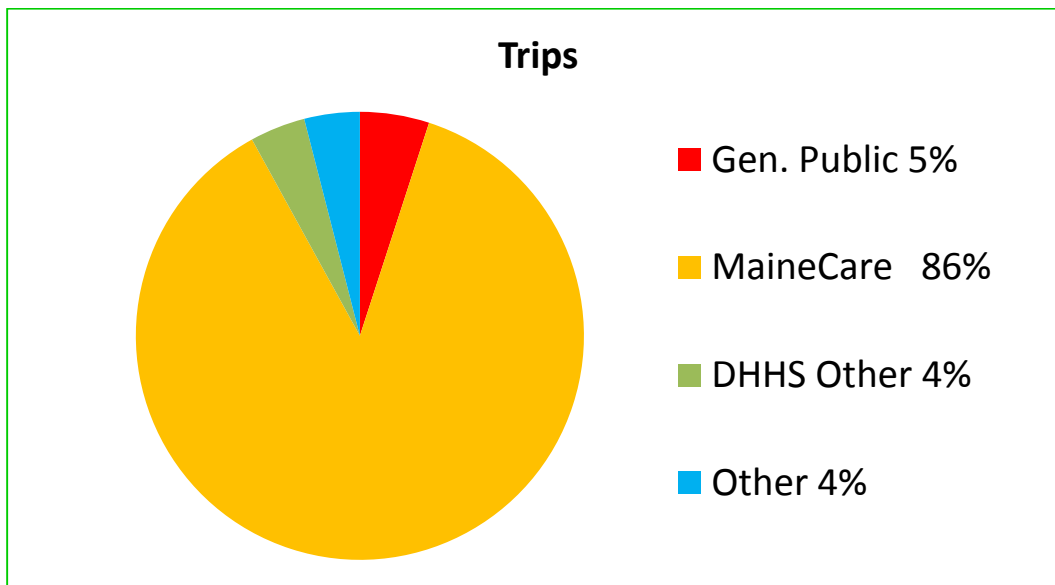


Figure 6: Percentage of 2.7 Million Trips Taken on the Ten Maine Regional Transportation Providers in FY12



A determining factor was that MaineDOT’s investment in these rural systems was based on the requirement that agency demand response vehicles offering social service sponsored trips were open to the general public, even though in most regions relatively few members of the general public knew about, requested, or actually took a trip in an agency vehicle. A number of providers made service available to every town in the region on a weekly basis.

In addition to demand response service in rural areas, many of the regional providers have developed more regularly defined services in small urban areas based primarily on need such as limited fixed route, flex route, commuter, or subscription service. These generally are in population clusters that exceed 5,000 people. The level of service varies from service to service, everything between once per week to many trips per day. Decisions to provide these services are largely driven by need and the ability to find adequate funding to provide the service. It took a creative mix of agency, private, local, state, or federal fund sources to institute these more regularly defined services.

2.7 Public Transportation for Intercity Service

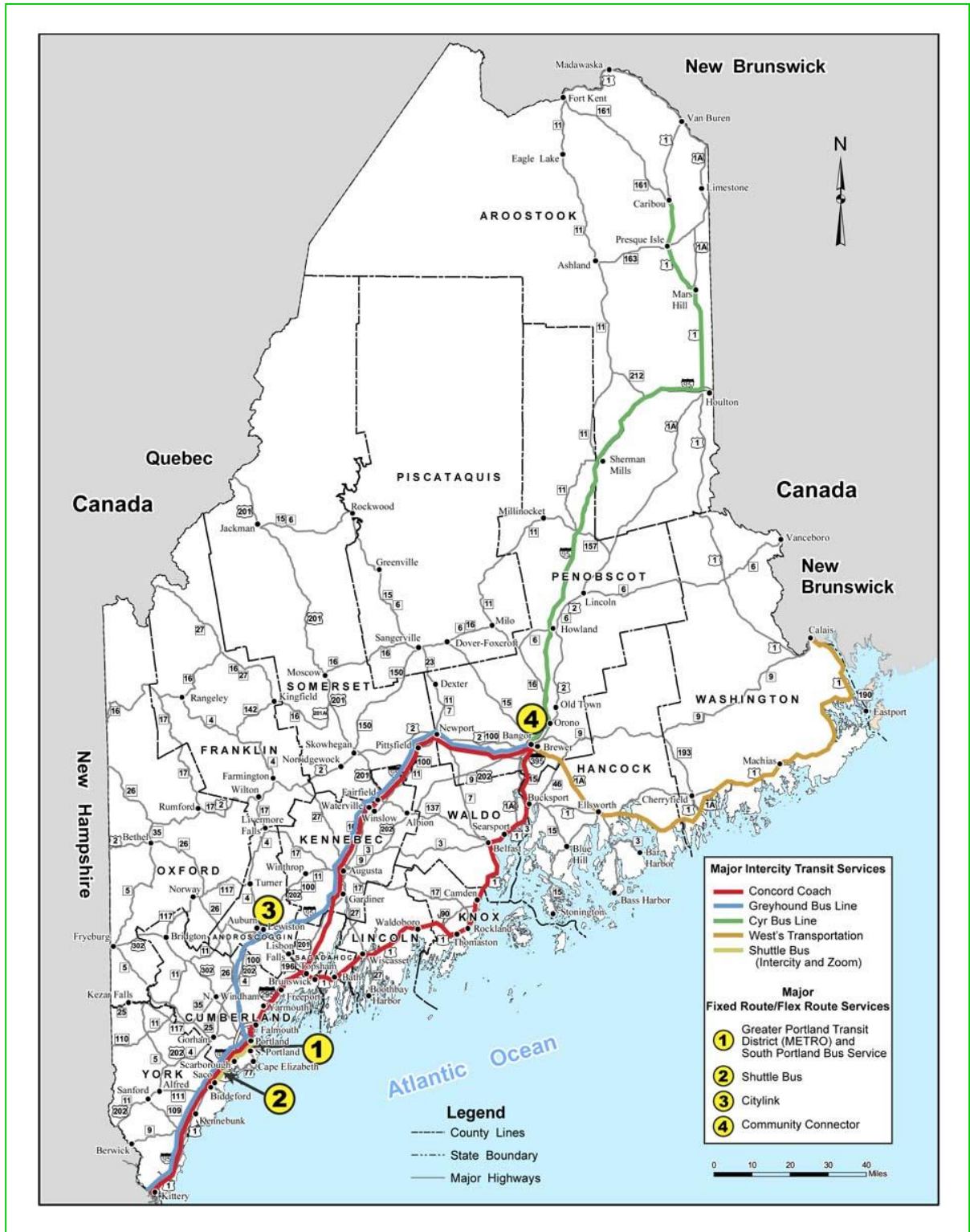
Intercity systems are those with regularly scheduled fixed bus routes that operate with limited stops between two urbanized areas, or that connect rural areas to an urbanized area. MaineDOT provides funding support for two private sector intercity services (Bangor to Caribou and Calais to Bangor), as well as one public sector service (Biddeford-Saco-Old Orchard Beach to Portland). There are two private sector intercity transportation providers in the state, Greyhound and Concord, which do not receive funds from MaineDOT to operate service (although Concord has received capital assistance at its Portland station).

Intercity transit services are provided by a variety of public and private transit providers, some of whom receive public financial support from the Federal Transit Administration and the Maine Department of Transportation. Intercity transit systems provide a transit “spine” that serves major portions of Maine. The state is served by two private bus lines, Concord Coach Lines and Greyhound, and four publically supported services, Cyr Bus Lines, Shuttle Bus Intercity and Shuttle Bus ZOOM, and West’s Transportation. Concord Coach Lines, one of the largest providers, provides service along the Maine Turnpike/I-95 corridor between Boston, Portland, Augusta, Waterville and Bangor. Its service also extends along the Route 1 coastal corridor between Portland and Brunswick, Bath, Rockland and Bangor. From Bangor, Cyr Bus provides service along Route I-95, then Route 1 north to Caribou, and West Bus provides service along the Route 1/1A corridor between Calais and Bangor. Greyhound provides twice daily service between Bangor and Boston with stops in Lewiston-Auburn (currently not served by Concord).

In Southern Maine, ShuttleBus provides service between Biddeford-Saco and Portland, and a second commuter service between the same communities. A number of other transit services can and do connect with the intercity spine, particularly at transit hubs and stations in Portland, Lewiston-Auburn, Augusta, Waterville, Bangor, and at various bus stops in midcoast Maine, Downeast Maine, and Aroostook County. *Figure 7: Major Intercity Services* contains a map of the

major intercity transit services and marks the location of the major fixed route/flex route services.

Figure 7: Major Intercity Services



2.8 Public Transportation that Operates Seasonally

Tourism is an important industry in the state. According to the Maine Office of Tourism and the Maine Department of Economic and Community Development, the number of visitors to the state increased by 7 percent from 2012 to 2013. Direct tourism expenditures in 2012 increased by 6.5% to \$5.23B. Tourism supports more than 88,500 jobs, or 13 percent of all employment. (McCrea) In addition to services available year round, MaineDOT also supports tourism by supporting seasonal fixed route service that is open to the general public. There are four publicly supported seasonal transit services, all of which are operated by year-round transit providers that operate services in addition to the seasonal services. “Summer Service” is offered on Mount Desert Island and Schoodic Peninsula (Island Explorer) and six towns in York County (Shoreline Explorer). “Winter Service” is provided in communities surrounding two significant skiing destinations (Mountain Explorer at Sunday River and Sugarloaf Explorer at Sugarloaf). All four of the seasonal services are funded through private / public partnerships.

2.9 Public Ferry Service

There are four publicly supported ferry systems in Maine including the Casco Bay Island Transit District (CBITD), the Maine State Ferry Service (MSFS), the Isle au Haut Boat Services, and the Cranberry Isles Commuter Ferry. Both the CBITD and MSFS are relatively large systems whose ferries carry both passengers and vehicles, while the Isle au Haut Boat Services and Cranberry Isles Commuter Ferry are relatively small systems that carry passengers but no vehicles. The data in table 6 is included here as a reference point to show the amount of public monies that are allocated to the ferry services and because some of that money is allocated from Federal Transit Administration funds.

While the ferry services primarily serve year round residents, they also adjust schedules seasonally to accommodate tourism and seasonal residents. Some ferries transport vehicles and freight in addition to passengers. In FY12, the four ferry systems transported over 1.4 million people. In FY12 state and federal funds contributed \$4.7 million to the operation of the ferry services, out of budgets totaling approximately \$14 million. In the case of the Maine State Ferry System, state or federal funds accounted for almost half of the operating funds for the service (\$3.9 million of \$8 million total cost) (Rothe)

Table 6: Public Financial Support for Ferry Systems FY 2012

Public Financial Support for Ferry Systems FY 2012		
Ferry System	Approximate Budget	Public Financial Support
Casco Bay Island Transit District ¹	\$5,500,000	\$714,696
Maine State Ferry Service ²	\$8,000,000	\$3,949,429
Isle au Haut Boat Services ³	\$516,450	\$58,000
Cranberry Isles Commuter Ferry ⁴	\$49,181	\$17,349

¹MaineDOT Locally Coordinated Transit Plan, Casco Bay Island Transit District, CBITD, FY 2013-2017.

²15 August, 2013. Telecommunication.

³MaineDOT Locally Coordinated Transit Plan, Isle au Haut Boat Services, IaH Mailboat, FY 2013-2017.

⁴MaineDOT Locally Coordinated Transit Plan, Cranberry Isles Commuter Ferry, FY 2013-2017.

2.10 MaineCare Brokerage System

The federal Center for Medicaid Services (CMS) raised concerns that across the United States transit systems that were also functioning as the provider of non-emergency medical transportation under Medicaid might have a conflict of interest because providers might use their own vehicles to provide a ride, rather than using the least expensive alternative that might be available from someone else. In response to this federal concern, the Maine Department of Health and Human Services launched a competitively awarded transportation brokerage system on August 1, 2013 for non-emergency medical transportation.

One firm was awarded a contract to broker MaineCare funded trips in Regions 1, 2, 4, 5, 6, and 7. Contracts were awarded to two other firms to broker MaineCare funded trips in Regions 3 and 8. In 2014 the contract was rebid and in Regions 1, 2, 6, 7, and 8 the contract was awarded to one broker. The contract was awarded to another broker in Regions 3 and 4. A third broker was awarded the contract in Region 5. MaineCare clients call the broker for their region, who in turn will arrange the least expensive or only available non-emergency medical trip; the trip can be provided by a regional transportation provider, a taxi service, or some other qualified transportation service provider. Brokers can provide up to 25% of the trips using their own vehicles. A key feature of the brokerage system is the stipulation that vehicle trips are for the exclusive use of MaineCare riders unless equivalent funding is provided for the non-MaineCare riders in the vehicle. Commingling of passengers based on the source of funds paying for their trip is difficult due to varying rates of reimbursement by various funding sources. In effect, the brokerage system changed what had been a regionally coordinated transportation system that leveraged all sources of funds to maximize transportation options to one where funding for

given types of trips were separated based on the reimbursement rate. In many rural and remote areas, this meant that intermittent service previously open to the general public has disappeared or is less available to those who might access the service.

2.11 Summary of Chapter 2

Chapter 2 is “Transit in Maine 101,” providing a baseline of information about public transportation in the state.

- FTA in FY 2012 provided over \$12 million to support Maine’s transit systems, but the bulk of the support, 78%, is for two programs: §5307 Urban (\$4.1 million); and §5311 Rural (\$5.4 million).
- State of Maine funding for public transit in FY2012 was \$547,845 and in FY 2013 was \$547,845.
- Maine’s FY 2012 per capita financial support for transit (\$0.40) is below the national average (\$45.66), and is also less than that of Vermont (\$10.92), but more than that of New Hampshire (\$0.32).
- Federal funding for public transit has increased, but state funding has remained virtually unchanged since 1995.
- There is substantial local municipal financial support for the state’s fixed route transit systems. There is little local funding support for rural transit systems that operate in most of Maine outside of the urban areas.
- To administer and distribute state and federal public transportation funds, MaineDOT divided the state into geographic regions. The regions are further divided, by population, into rural or urban areas. These designations are important because they are the principal determinant in eligibility for a variety of grants.
- When using agency vehicles, and sometimes when using volunteers, regional transportation providers were able to achieve efficiencies by commingling individuals whose trips were paid by different funding sources.
- MaineDOT’s investment in rural systems was based on the requirement that agency demand response vehicles were open to the general public, even though in most regions relatively few members of the general public knew about, requested, or actually took a trip in an agency vehicle
- In response to federal concern, the Maine Department of Health and Human Services launched a competitively awarded transportation brokerage system on August 1, 2013 for non-emergency medical transportation.

- A key feature of the brokerage system is the stipulation that vehicle trips are for the exclusive use of MaineCare riders unless equivalent funding is provided for the non-MaineCare riders in the vehicle.

This chapter was focused on describing funding distinctions and the background of transportation options in the urbanized and rural areas of the state, as well as connections between them. In the next chapter, the need for public transportation is discussed irrespective of any funding sources or delivery system.

CHAPTER 3.

ANALYZING THE DEMAND FOR PUBLIC TRANSPORTATION

For more information:

Task 11: Transit Needs Analysis

3.1 Introduction

As part of the research effort in developing the Maine Strategic Transit Plan 2025, a Technical Memorandum for *Task 11: Transit Needs Analysis* has been prepared on transit needs in the state. The memorandum is an analysis of transit needs in Maine and the extent to which existing transit providers are meeting the need. This chapter summarizes key points from that technical memorandum.

3.2 Analyzing the Need for Public Transportation

The question to address when thinking about the mobility needs of Mainers is: “How much transit service would be needed to fully address the mobility needs of transit dependent persons in rural areas?” The primary methodology to answer this question followed the analytical process outlined in *Transit Cooperative Research Program (TCRP) Report 161, Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation: Final Workbook*. (Washington D.C. 2013.) It uses an analytical method based on the number of households in a community without vehicles. The data concerning no-vehicle households is obtained from the American Community Survey portion of the U.S. Census website. A formula for New England is used to calculate the overall need for transportation services. The formula is conservative (it may significantly understate the need) because it does not take into account people who may have a vehicle but cannot rely on it or may need to use transit because of a disability or limitations due to old age.

In the urbanized areas, a compatible and consistent method, adjusted for urban conditions, was used to identify the need for transportation. Again, households without vehicles is the prime driver in identifying the need for transportation, but it was necessary to derive differently one of the variables used in the calculations. The study team contacted the people responsible for the methodologies used in developing the formulas for Maine’s MPOs. After reviewing the slightly different methods, the study team chose a hybrid formula for consistency. The basis for the calculation is the 2009 National Household Travel Survey, Federal Highway Administration. (Rothe telecommunication (Hooper) (Cooper)

One of the most important determinants in measuring transit services is the percentage of needs actually met. TCRP Report 161 states that “In the testing of these suggested methodologies with a number of rural transit agencies, it was found that, at best, only 20% of the mobility gap trip-based need was met.” Therefore, for the purposes of this plan, meeting 20% of the need or theoretical demand is deemed to be a good baseline goal for rural services.

There is a wide range in the eight regions to the extent transit systems meet the defined need for public transportation. Table 7 shows the percentage of demand being met in rural and urban areas based on FY12 trip data from the transportation providers. The total number of trips includes both general public and social service supported trips: fixed route, flex route, and MaineCare or social service trips provided by agency vehicles, volunteers, and friends and family programs. Trips on ferries are not included, nor are trips on seasonal services. (The formulas used in these calculations include only year-round services; seasonal services address additional needs, but only during the time periods in which they operate). Intercity trips are counted in the county of origin. The percentage of needs being met in rural areas ranges from a high of 30% for Sanford Transit in York County to a low of 7% for Knox County. In urban areas the range is 31% for South Portland Bus Service to 11% for CityLink.

Table 7: Percentage of Transportation Need Being Met in Rural and Urban Areas of Maine in FY12

Region	County or Area	% of Need Met	Region	County or Area	% of Need Met
1	Aroostook	22%	5	Waldo	21%
2	Hancock	16%	6	Cumberland METRO	17%
2	Washington	14%	6	Cumberland So Po Bus Service	31%
3	Penobscot UZA	24%	6	Cumberland Brunswick	10%
3	Penobscot Rural	26%	6	Cumberland rural	15%
3	Piscataquis	16%	7	Androscoggin Citylink	11%
4	Kennebec Explorer	15%	7	Androscoggin Rural	29%
4	Kennebec Rural	15%	7	Franklin	22%
4	Somerset	18%	7	Oxford	23%
5	Knox	7%	8	York ShuttleBus	15%
5	Lincoln	12%	8	York Sanford	30%
5	Sagadahoc -Bath	9%	8	York Rural	16%
5	Sagadahoc Rural	12%			

The following table, *Table 8: County Summary of Transit Need and Trips Provided FY 2012*, provides an overview by county of the annual transit need, the number of trips provided, and the number of trips provided as a percentage of the annual need. The total number of trips includes both general public and social service supported trips: fixed route, flex route, and MaineCare or social service trips provided by agency vehicles, volunteers, and friends and family programs. Trips on ferries are not included, nor are trips on seasonal services. Intercity trips are counted in the county of origin.

Table 8: County Summary of Transit Need and Trips Provided FY 2012

County Summary of Transit Need and Trips Provided FY 2012			
County	Annual Need (Trips)	Trips Provided	Trips Provided as a % of Annual Need
Androscoggin	6,025,200	654,002	11%
Aroostook	1,260,600	278,172	22%
Cumberland	11,696,100	2,099,781	18%
Franklin	410,100	90,833	22%
Hancock	705,330	115,027	16%
Kennebec	2,131,290	310,322	15%
Knox	532,440	37,166	7%
Lincoln	191,250	23,178	12%
Oxford	772,800	178,367	23%
Penobscot	5,788,600	1,420,462	25%
Piscataquis	276,930	43,029	16%
Sagadahoc	486,000	40,507	8%
Somerset	766,540	136,829	18%
Waldo	540,000	115,009	21%
Washington	594,600	81,317	14%
York	3,535,800	607,019	14%
Total, Maine	35,713,580	6,231,020	17%

(American Community Survey 5-Year Estimates Table B08201, TCRP Report 161, and Locally Coordinated Transit Plans for all transit providers receiving MaineDOT financial support.)

Table 8 shows that statewide, there is an annual need for 35,713,580 trips. Transit providers receiving MaineDOT financial assistance provided 6,231,020 trips in FY 2012, which was 17% of the overall need and below the baseline service figure of 20%. There was considerable variation in the trips provided as a percentage of the annual need, ranging from a high of 25% in Penobscot County, to a low of 7% in Knox County. The baseline service figure of 20% was exceeded in five counties: Aroostook, Franklin, Oxford, Penobscot and Waldo.

A significant point based on a recent analysis of transportation needs in Maine is not observable in Table 8: the majority - 54% - of Maine's transportation needs from households with no vehicles are located in communities with fixed route or flex route services. These are principally public transit services available in the urbanized areas and the small urban areas. The 54% figure does not include intercity service, seasonal service, two rural routes in Hancock and Washington Counties, or commuter services.

3.3 The Role of Volunteers

There may be a role for volunteers to play in helping to meet trip needs. For many years, most of the state's demand response providers relied heavily on volunteers who were reimbursed on a per mile basis to transport MaineCare customers to non-emergency medical care. In FY 2012, volunteers provided 30% or 810,000 of the 2.7 million MaineCare trips (*Locally Coordinated Transit Plans 2013-2017*). The cost for volunteers to provide these rides included a mileage reimbursement rate (41 cents/mile for a single rider) plus the administrative cost of recruiting, training, supervising and reimbursing volunteers. Volunteers are considered "uncompensated" if they are not reimbursed for their services. "Compensated" volunteers receive some form of reimbursement for their service.

There are two examples of rural counties in which volunteers have been used to transport seniors:

- In Aroostook County, Maine, Aroostook RSVP (Retired Senior Volunteer Program) utilizes volunteers to assist the non-MaineCare elderly population with their medical transportation needs. In a July, 2014 MaineDOT survey of assisted living facilities and service agencies, Aroostook RSVP reported that volunteers provided 1,597 rides in 2013 at a mileage reimbursement rate for volunteers of 23 cents/mile. Aroostook County's estimated transit need is 1,260,000 trips/year. The trips provided by Aroostook RSVP addressed 0.12% of the estimated need (an eighth of a percent).
- In Blount County, Tennessee, the Smiles (Senior Miles) program, which relies on volunteers, has been in effect for 10 months. The Smiles program provided 2,060 trips during the 10-month period, for a projected 12-month rate of 2,472 trips. Blount County

has an annual trip need of 1,130,000 trips (very similar to Aroostook’s annual need). The estimated 12-month trip rate of 2,472 trips would meet 0.22% of the estimated need (a fifth of a percent).

Using information from *Table 11: Maine Transit Services 2012 Administrative and Operating Costs to Meet 20% of Transit Need*, the estimated annual trip theoretical need in rural areas is 8,517,850 trips. If programs similar to Aroostook County’s RSVP program and Blount County’s SMiles program were in place in the rural portion of every county, the potential number of trips is shown in *Figure 8: Number of Estimated Annual Trip Need in Rural Areas*

Figure 8: Number of Estimated Annual Trip Need in Rural Areas

Estimated trip need	Number of Trips at 0.12% of need	Number of Trips at 0.22% of need	Number of Trips at 1% of need
8,517,850	10,221	18,739	85,178

Total costs at \$2.50/trip (assuming 10 miles at \$0.25/mile) would be \$25,553 at the Aroostook RSVP trip rate, \$46,848 at the Blount County trip rate, and \$212,945 to address 1% of the need. These estimates do not take into account the administrative costs of operating a volunteer program.

Volunteer programs such as Aroostook County’s RSVP program and Blount County’s SMiles program only supply a modest portion of the overall need and while important as part of the mix of services are not adequate to meet a substantial portion of the unmet theoretical demand.

3.4 Summary of Chapter 3

This chapter is an analysis of transit needs in Maine, the extent to which existing transit providers are meeting the need. In summary:

- Meeting 20% of the need is deemed to be a good baseline goal for rural services.
- The percentage of needs being met in rural areas ranges from a high of 30% for Sanford Transit in York County to a low of 7% for Knox County.
- Statewide there is an annual need for 35,713,580 trips. Transit providers receiving MaineDOT financial assistance provided 6,231,020 trips in FY 2012, which was 17% of the overall need and below the baseline service figure of 20%.
- There may be a role for volunteers to play in helping to meet trip needs, but it is small.

This chapter presented an analysis of transit needs in Maine and the extent to which existing transit providers are meeting the need, and the next chapter explains existing funds and the costs to continue and expand services.

CHAPTER 4.

EXISTING FUNDING AND COSTS TO CONTINUE AND EXPAND SERVICES

For more information:

Tasks 14 and 15: Costs to Continue Services and Fill Gaps

4.1 Introduction

Chapter 4 is a summary of provider revenues in FY 2012, an analysis of costs by service type, what it would cost to continue existing transit services to the year 2025, what it would cost to address unmet needs, and a review of capital needs.

4.2 Funding Sources for Public Transit Services

Maine's publicly funded transit services rely on a variety of funding sources. The following is a revenue summary by service type including intercity, fixed route, flex route, seasonal flex-route and demand response.

Intercity services. In FY 2012, total revenues for intercity services were \$1,246,582. Major revenue sources were fares (\$584,405 or 47%), the Federal Transit Administration (\$422,465 or 34%), and "other" (\$168,045, or 13%). A major portion of the "other" category was a contribution of \$115,790 from the Maine Turnpike Authority to ShuttleBus' ZOOM service.

Fixed route services. There are four fixed route services which collectively had revenues of \$11,667,810 in FY 2012. The major revenue sources included fares (\$3,158,340, or 27%), FTA (\$3,150,195, also 27%), and local funds (\$4,798,309, or 41%). The data included in Table 9 do not include substantial funding increases from the Federal Transit Administration to the Portland urbanized area beginning in FY 2013.

Flex route services. The state's flex route services collectively had revenues of \$3,113,835 in FY 2012. The major revenue sources included fares (\$440,912, or 14%), FTA (\$1,387,893 or 45%), and local funds (\$721,968 or 23%).

Seasonal flex route services. There are four flex route seasonal services which collectively had revenues of \$3,068,643 in FY 2012.

Demand response services. There are 10 demand response services in Maine which collectively had revenues of \$43,014,353 in FY 2012. By far, the largest revenue source was MaineCare (\$34,880,460) which contributed 81% of all revenues. Other major revenue sources included FTA funds (\$2,834,069 or 7%), DHHS services other than MaineCare (\$2,507,678 or 6%) and local

contributions (\$555,863 or 1%). The ‘other’ category amounted to \$1,590,904, or 4%; specific sources are described in footnotes at the end of Table 9. Summaries of revenues by service type are also shown in Table 9. For example, Demand Responses services totaled over \$43 million in revenue.

Table 9: Provider Revenue Summary FY 2012 Administration and Operating Only (No Capital) in Dollars

Provider Revenue Summary FY 2012 Administration and Operating Only (no capital) in Dollars ¹							
Services	Fares (%)	FTA	MaineDOT	Local	Advertising	Other	Total
Intercity							
CYR Bangor to Caribou	320,519 (81)	75,000	0	0	0	0	395,519
ShuttleBus Intercity ²	123,262 (44)	121,887	0	0	35,834	0	280,983
ShuttleBus ZOOM ²	87,826 (22)	161,750	0	0	35,833	115,790 ⁶	401,199
West's Coastal Connection ⁵	52,798 (31)	63,828	0	0	0	52,255 ⁷	168,881
Total	584,405 (47)	422,465	0	0	71,667	168,045	1,246,582
Fixed Route							
Citylink	211,753 (14)	785,010	48,026	415,558	15,121	14,805 ⁸	1,490,273
Community Connector	867,181 (37)	754,783	44,858	629,935	71,783	0	2,368,540
Metro	1,779,927(20)	1,452,818	83,746	3,036,947	184,620	77,819 ⁹	6,615,877
South Portland Bus	299,479 (25)	157,584	10,002	715,869	10,186	0	1,193,120
Total	3,158,340 (27)	3,150,195	186,632	4,798,309	281,710	92,624	11,667,810
Flex Route							
Bath City Bus	12,724 (11)	48,771	6,194	51,923	0	343	119,973
Brunswick Explorer ³	23,603 (09)	201,018	0	50,836	0	0	275,457

Provider Revenue Summary FY 2012 Administration and Operating Only (no capital) in Dollars ¹ (Continued)							
Services	Fares (%)	FTA	MaineDOT	Local	Advertising	Other	Total
DTI Year-Round ⁴	30,000 (16)	103,269	15,869	11,385	0	32,936 ¹⁰	193,459
DTI Commuter ⁴	105,244 (37)	89,883	0	0	0	92,436 ¹¹	287,563
Kennebec Explorer	67,411 (10)	368,999	50,385	160,443	0	0	647,238
Sanford Transit	7,166 (12)	14,362	0	25,255	775	12,852 ¹²	60,410
ShuttleBus Local Service ²	125,129 (15)	128,798	82,747	345,000	15,133	125,499 ¹³	822,306
West's Washington County	5,590 (07)	44,984	7,713	6,500	0	13,476 ¹⁴	78,263
York WAVE	64,027 (10)	387,809	0	70,626	0	106,704 ¹⁵	629,166
Total	440,912 (14)	1,387,893	162,908	721,968	15,908	384,246	3,113,835
Seasonal Flex Route Systems							
Island Explorer, Hancock Co. ⁴	0	190,772	0	73,200	0	1,502,116 ¹⁶	1,766,088
Mountain Exp. Sugarloaf Exp.	0	231,955	0	171,935	0	236,735 ²⁸	640,625
Shoreline Explorer, York Co.	50,844 (08)	267,500	28,404	68,459	0	246,723 ¹⁷	661,930
Total	50,844 (08)	690,227	28,404	313,594	0	1,985,574	3,068,643
Total Intercity, Fixed Route, Flex Rt., Seasonal Flex Rt.	4,234,501 22%	5,650,780 30%	377,944 2%	5,833,871 30.5%	369,285 2%	2,630,489 14%	19,096,870 100%

Provider Revenue Summary FY 2012 Administration and Operating Only (no capital) in Dollars ¹ (Continued)									
	FTA	MaineDOT	MaineCare	DHHS	Fares	Grants	Local	Other	Total
Demand Response Systems									
ARTS	258,664	33,188	3,078,731	185,838	82,811	0	99,228	25,953 ¹⁸	3,764,413
WHCA	355,305	16,931	2,141,542	234,295	3,407	25,085	0	67,843 ¹⁹	2,844,408
Penquis	478,794	46,436	6,055,691	476,859	4,588	44,508	0	256,015 ²⁰	7,362,891
KVCAP	1,082	0	5,269,461	468,333	0	5,056	1,784	27,965 ²¹	5,773,681
Coastal Trans	158,998	14,630	1,552,511	51,799	44,352	0	72,921	30,023 ²²	1,925,234
WCAP	98,856	10,611	1,391,082	80,877	13,130	0	277,423	32,988 ²³	1,904,967
RTP	440,279	38,832	4,473,143	373,690	49,808	77,325	16,618	380,745 ²⁴	5,850,440
WMTS	553,897	40,752	1,911,738	113,929	54,138	0	62,889	202,688 ²⁵	2,940,031
Community Concepts	0	0	5,712,831	292,871	0	0	0	395,477 ²⁶	6,401,179
YCCAC	488,194	17,332	3,293,730	229,187	12,459	10,000	25,000	171,207 ²⁷	4,247,109
Total	2,834,069	218,712	34,880,460	2,507,678	264,693	161,974	555,863	1,590,904	43,014,353
	7%	0.5%	81%	6%	0.6%	0.4%	1%	4%	100%

¹ Source: Locally Coordinated transit plans (2013-2017) for the respective providers unless otherwise indicated.

² Source: telecommunication with ShuttleBus 5/9/14 and 5/14/14.

³ Source: telecommunication with Coastal Trans 5/8/14, audit review for FTA, MaineDOT revenues, 7/29/14.

⁴ Source: telecommunication with DTI 5/8/14.

⁵ Source: telecommunication with West's 5/9/14.

⁶ Maine Turnpike Authority.

⁷ West's Transportation, Inc., UMM, Edge. Telecommunication with West's 5/9/14.

⁸ Interest, rent, vending.

⁹ CNG Usage Credit and contract service.

¹⁰ Other federal, business direct, Bucksport Taxi, interest.

¹¹ Business direct, Island Explorer, interest.

¹² MaineCare, Social Services Block Grant. Telecommunication with YCCAC 7/3014.

¹³ University of New England, other grant, contract stop.

¹⁴ West's Transportation, Inc., communities. Telecommunication with West's 5/9/14.

¹⁵ Social Services Block grant, Aspire/VY/GED. Telecommunication with YCCAC 7/3014.

¹⁶ ANP Capital, Acadia National Park, corporate support, business direct service, business donations, individual donations, friends groups and interest

¹⁷ Social Services Block Grant and business sponsors. Telecommunication with YCCAC 7/3014.

¹⁸ Interest income, sale of buses, unanticipated MaineCare payment. Telecommunication with ARTS 9/4/14.

¹⁹ Misc. trips – senior shopping, private pay, ad hoc rides. Telecommunication with WHCA 9/15/14.

²⁰ Service agreements with various schools and providers, paratransit services. Telecommunication with Penquis 8/13/14.

²¹ Adult protective services, private pay rides. Telecommunication with KVCAP 9/17/14.

²² Gas tax rebate, Misc. rides.

²³ Other state contracts, fee for service.

²⁴ ADA, United way, municipal grants, farebox donations, fuel tax refund.

²⁵ Fuel tax refund, fares, ADA, small contracts.

²⁶ Foundation grants, donations, school transportation.

²⁷ Southern Maine Area on Aging, CTS. Telecommunication with YCCAC 8/13/14.

²⁸ Business contributions. Telecommunication with WMTS 10/7/14.

4.3 Costs by Service Type in FY 2012

Table 10: Budget/Cost Overview FY 2012 includes a summary of trips by service type, the costs of providing those trips and the extent they met estimated needs in FY 2012. The data includes:

Trips provided by each service type. Service types include intercity, fixed route, flex route, seasonal flex route, demand response general public, and demand response MaineCare and all other. A number of providers offer more than one type of service. For example, ShuttleBus offers intercity services (the Biddeford/Portland intercity service), a commuter service for Biddeford/Portland (ZOOM commuter service), and a local service (Biddeford/Saco/Old Orchard Beach). The service type substantially impacts the cost of providing the service. Intercity costs are generally higher than other types of services because each passenger is generally travelling longer distances than would be the case on an urban, fixed route system. This is especially true in very rural areas such as Aroostook and Washington Counties where there are generally fewer passengers than in more urban areas such as the intercity corridor between Biddeford and Portland.

Maine's fixed route services in general have the lowest costs per trip because they serve Maine's largest cities where there are more people needing transit services and the services are more comprehensive (greater frequency on routes and more days of service) than in rural areas. Hence the services are more available and more useful to residents of urban areas. The Community Connector system serving the greater Bangor/Brewer area has the lowest costs per trip of any Maine transit provider in part because of the student bus pass system it has developed with area colleges and the fact that Penquis purchases a large number of tickets and passes for MaineCare customers living in Community Connector's service area.

Flex route services generally have higher costs per trip than fixed route services because they serve smaller communities that have smaller transit-dependent populations. Several flex route systems, including DTI's year-round service in Hancock County and West's Washington County service, have high trip costs because they serve large geographic areas with low population densities.

There are four major seasonal flex route systems in Maine with costs ranging from \$4.11/trip (Island Explorer in Hancock County) to \$10.17/trip (Shoreline Explorer in York County). The largest system in terms of ridership is the Island Explorer (439,053 trips in FY 2012). The Island Explorer system's high ridership numbers are due in part to the high number of seasonal visitors to Acadia National Park and the fact that the service is free (donations are accepted). Per trip costs are low in large part because of large ridership numbers.

All of Maine's demand response systems (designated regional providers) transported members of the general public in FY 2012, but the ARTS bus was exceptional in terms of the large number of general public passengers it carried (50,360). ARTS focused its demand response buses in five communities where over half the County's transit needs are located: Caribou, Presque Isle, Houlton, Madawaska and Fort Kent.

All of the state's demand response MaineCare and all other providers operate in rural areas where transit customers must often travel long distances to get to needed medical or other services. Demand response costs per trip for MaineCare/all other were similar throughout the state. The costs included the total FY 2012 costs of providing rides in agency vehicles, in private vehicles with volunteer drivers, and through the Friends and Family program. The average cost per trip (\$15.71) would have been much higher if the data had included only trips provided in agency vehicles. Trip cost variations between providers is partly due to different mixes of transportation modes. Providers that relied heavily on volunteers and MaineCare's Friend and Family Program may have lower trip costs than those providers using a higher percentage of agency vehicles to provide rides. By way of example, in FY 2012, volunteers provided 27% of all trips in Region 4 for KVCAP, but only 3% of all trips in Region 1 for ARTS.

Table 10 shows cost per trip for each service, as well as an average cost for each category of service. The highest costs/trip were two intercity services: West's Coastal Connection (\$51.68 per trip) and the Cyr Bus Bangor to Caribou service (\$25.29 per trip). These intercity costs are higher because of the large distances covered by the service and relatively low ridership levels. The lowest cost/trip was a fixed route provider, Community Connector (\$2.35 per trip).

In terms of cost per trip, the fixed route services had the lowest overall average cost per trip (\$3.70/trip). The flex route services ranged in cost from a low of \$4.61/trip (Sanford Transit), to a high of \$16.96/trip (West's Washington County service) with an average cost of \$8.88 per trip.

The general public demand response system operated by ARTS had the lowest cost (\$7.66/trip). All other demand response systems (which served primarily MaineCare customers in FY 2012) had costs ranging from a low of \$12.59/trip (Coastal Trans) to a high of \$17.37/trip (WHCA). The average cost was \$15.71/trip.

Percent of transit demand met by each service is shown for each service and ranges from meeting 1% of the theoretical demand for the intercity services to an average of 15% for the fixed route services.

Table 10: Budget/Cost Overview FY 2012

Budget/Cost Overview FY 2012 Administration and Operating Only (no capital)							
Services	Trips ¹	Admin/Op. Expenses ¹	Cost/Trip	FTA \$ ¹	MaineDOT \$ ¹	FTA&MaineDOT Cost/Trip	% Need Met ²
Intercity							
CYR Bangor to Caribou	17,034	\$430,732	\$25.29	\$75,000	\$0	\$4.40	1%
ShuttleBus Intercity	33,231	\$319,118 ³	\$9.60	\$121,887 ³	\$0 ³	\$3.67	1%
ShuttleBus ZOOM	31,488	\$406,287 ³	\$12.90	\$161,750 ³	\$0 ³	\$5.14	1%
West's Coastal Connections	3,461	\$178,881 ⁷	\$51.68	\$63,828 ⁷	\$0 ⁷	\$18.44	1%
Total	85,214	\$1,335,018	\$15.67	\$422,465	\$0	\$4.35	1%
Fixed Route							
Citylink	350,604	\$1,457,314	\$4.16	\$785,010	\$48,026	\$2.38	7%
Community Connector	1,010,319	\$2,369,972	\$2.35	\$754,783	\$44,858	\$0.79	21%
Metro	1,464,643	\$6,344,733	\$4.33	\$1,452,818	\$83,746	\$1.05	15%
South Portland Bus	247,370	\$1,193,121	\$4.82	\$157,584	\$10,002	\$0.68	26%
Total	3,072,936	\$11,365,140	\$3.70	\$3,150,195	\$186,632	\$1.09	15%

Budget/Cost Overview FY 2012 Administration and Operating Only (no capital) (Continued)							
Services	Trips ¹	Admin/Op. Expenses ¹	Cost/Trip	FTA \$ ¹	MaineDOT \$ ¹	FTA&MaineDOT Cost/Trip	% Need Met ²
Flex Route							
Bath City Bus	13,661	\$113,070	\$8.28	\$48,771	\$6,194	\$4.02	4%
Brunswick Explorer	26,722	\$278,275 ⁴	\$10.41	\$201,018 ⁴	\$0 ⁴	\$7.52	6%
DTI Year-Round	13,382	\$189,340 ⁵	\$14.15	\$103,269 ⁵	\$15,869 ⁵	\$8.90	2%
DTI Commuter	47,919	\$286,609 ⁵	\$5.98	\$89,883 ⁵	\$0 ⁵	\$1.88	7%
Kennebec Explorer	64,329	\$647,238	\$10.08	\$368,999	\$50,385	\$6.52	4%
Sanford Transit	16,802	\$77,410 ⁶	\$4.61	\$14,362 ⁶	\$0 ⁶	\$0.85	5%
ShuttleBus Local Service	112,432	\$747,786 ³	\$6.65	\$128,798 ³	\$82,747 ³	\$1.88	4%
West's Washington County	4,496	\$76,263 ⁷	\$16.96	\$44,984 ⁷	\$7,713 ⁷	\$11.72	1%
York WAVE	52,097	\$707,080 ⁶	\$13.57	\$387,809 ⁶	\$0 ⁶	\$10.59	1%
Total	351,840	\$3,123,071	\$8.88	\$1,387,893	\$162,908	\$4.88	7%

Budget/Cost Overview FY 2012							
Administration and Operating Only (no capital) (Continued)							
Services	Trips¹	Admin/Op. Expenses¹	Cost/Trip	FTA \$¹	MaineDOT \$¹	FTA&MaineDOT Cost/Trip	% Need Met²
Seasonal Flex Route Systems							
Island Explorer, Hancock Co	439,053	\$1,804,666 ⁵	\$4.11	\$190,772 ⁵	\$0 ⁵	\$0.43	n.a.
Mountain, Sugarloaf Exp.	161,619	\$676,586	\$4.19	\$231,955	\$0	\$1.44	n.a.
Shoreline Explorer, York Co	84,814	\$862,530 ⁶	\$10.17	\$267,500 ⁶	\$28,404 ⁶	\$3.49	n.a.
Total	685,486	\$3,343,782	\$4.88	\$690,227	\$28,404	\$1.05	n.a.
Total Intercity, Fixed Route, Flex Rt., Seasonal Flex Rt.							
	4,195,476	\$19,167,011	\$4.57	\$5,650,780	\$377,944	\$1.44	9.8%⁹
Demand Response General Public							
ARTS General Public	50,360	\$386,002 ⁸	\$7.66	\$258,664	\$0	\$5.14	4%
Demand Response Systems MaineCare and All Other							
ARTS MaineCare, All Other	227,812	\$3,455,563 ⁸	\$15.17	\$0	\$33,188	\$0.15	18%
WHCA	163,832	\$2,845,824	\$17.37	\$355,305	\$16,931	\$2.27	13%
Penquis	437,674	\$7,121,485	\$16.27	\$478,794	\$46,436	\$1.20	7%

Budget/Cost Overview FY 2012 Administration and Operating Only (no capital) (Continued)							
Services	Trips ¹	Admin/Op. Expenses ¹	Cost/Trip	FTA \$ ¹	MaineDOT \$ ¹	FTA&MaineDOT Cost/Trip	% Need Met ²
KVCAP	393,108	\$5,590,839	\$14.22	\$1,082	\$0	-	14%
Coastal Trans	153,184	\$1,928,182 ⁴	\$12.59	\$158,998 ⁴	\$14,630 ⁴	\$1.13	13%
WCAP	117,945	\$1,942,407	\$16.47	\$98,856	\$10,611	\$0.93	22%
RTP	345,800	\$5,834,847	\$16.87	\$440,279	\$38,832	\$1.39	3%
WMTS	200,677	\$2,933,410	\$14.61	\$553,897	\$40,752	\$2.96	3%
Community Concepts	383,566	\$6,624,234	\$17.27	\$0	\$0	\$0	5%
YCCAC	282,362	\$4,247,109	\$15.04	\$488,194	\$17,332	\$1.79	8%
Total	2,705,960	\$42,523,900	\$15.71	\$2,575,405	\$218,712	\$1.03	8%

¹ Source: Locally Coordinated transit plans (2013-2017 for the respective providers unless otherwise indicated).

² The data shown in this table reflect the extent to which each service meets the estimated needs of its geographical area. A separate needs assessment shows the extent to which the estimated needs in each county are met collectively by all of the providers in each county.

³ Source: telecommunication with ShuttleBus 5/9/14 and 5/14/14.

⁴ Source: telecommunication with Coastal Trans 5/8/14.

⁵ Source: telecommunication with DTI 5/8/14.

⁶ Source: telecommunication with YCCAC 5/9/14 and 5/14/14.

⁷ Source: telecommunication with West's 5/9/14.

⁸ Source: telecommunication ARTS 5/20/14.

⁹ Seasonal flex route trips not included in calculation

4.4 Cost to Maintain Existing Services

Existing Services at 1.5% Inflation. Appendix E includes a projection of what it would cost to maintain existing services exclusive of commuter services and regional providers at their current level through 2025, assuming an annual inflation rate of 1.5%. The cost projections are based on FY 2012 cost figures.

The regional provider services have not been individually calculated because their service methodologies changed significantly when the brokerage system went into effect on August 1, 2013. However, the total cost of these services (exclusive of the general public demand response service provided by ARTS) is shown for the purposes of providing insight on the costs of operating agency vehicles in rural areas.

As shown in *Appendix E: Cost to Maintain Existing Services at 1.5% Annual Inflation Rate*, the cost to maintain intercity, fixed route and flex route services can be expected to increase from \$18.6 million in FY 2015, to \$21.6 million by 2025, an increase of 16%, assuming an annual inflation rate of 1.5%.

4.5 Cost to Meet 20% of Transit Need

As indicated previously, meeting 20% of the transit needs in urban and rural areas is a reasonable goal, but the cost to meet that goal would be greater than simply maintaining existing services because in many areas, existing transit services do not meet 20% of transit needs. Even when the different types of trips provided by multiple services operating in a given area are considered collectively, as a group the 20% goal is not met.

Table 11: Maine Transit Services 2012 Administrative and Operating Costs to Meet 20% of Transit Need contains information about what the administrative and operating costs that would be needed to meet 20% of transit needs in all areas of the state. This table is shown so that it can be understood that each specific area of the state and each specific service type has some gap in services to meet the 20% goal except for the following areas which exceed the 20% goal:

- Community Connector (Urban Fixed Route) 24%
- South Portland Bus (Urban Fixed Route) 31%
- Sanford Transit (Flex Route Small Rural City) 30%
- Aroostook (Demand Response Rural County) 22%
- Franklin (Demand Response Rural County) 22%
- Oxford (Demand Response Rural County) 23%
- Penobscot (rural only) (Demand Response Rural County) 25%
- Waldo (Demand Response Rural County) 21%

The above list of areas that exceed the 20% goal are important to note and form the undergirding for the concept of the 20% goal itself. Since there are services and activities in the state that exceed the 20% goal it can be stated confidently that 20% is achievable. Table 11 is also an important table for determining what service gaps exist and what it would cost to address those gaps.

To understand each of the data categories in Table 11 it is helpful to use one service as an illustration. Using Citylink (the first service in the table) as the example, the trip need is the total need for Lewiston and Auburn (the two cities in which Citylink operates). The total need is 5,205,000 trips; the estimated 20% baseline need is 1,041,000 trips. In FY 2012, there were 350,604 provider (Citylink) trips. Other trips were primarily MaineCare trips provided by Western Maine Transportation Services (WMTS) and Community Concepts. Total trips (572,490 trips) is the sum of all trips provided by Citylink, WMTS and Community Concepts. As can be seen in Table 11, the total trips provided met only 11% of the estimated need. The trip gap figure (468,510 trips) is derived by taking the baseline 20% need (1,041,000 trips) and subtracting the total number of trips provided (572,490 trips).

There are two cost estimates for addressing the trip gap. The first and lowest cost is derived by multiplying the trip gap by the least expensive FY 2012 cost/trip among similar services, as shown in Table 12. The least expensive fixed route cost/trip is that of Community Connector (\$2.35). The second cost figure is the average cost/trip among all the fixed route providers (\$3.70).

What Table 11 illustrates is that in every service category, fixed route, flex route urbanized area, flex route small rural cities, flex route rural and rural demand response there is a trip gap. To address the trip gap in all areas of the state cost range from \$4.8 million for rural demand response service at the high gap cost to \$.75 million for the lowest gap cost for flex route in rural cities and the next table, table 12 summarizes those costs.

Table 11: Maine Transit Services 2012 Administrative and Operating Costs to Meet 20% of Transit Need

Maine Transit Services 2012 Administrative and Operating Costs to Meet 20% of Transit Need									
Services	100% of Trip Need ¹	20% of Trip Need	Fixed Rt Trips 2012 ²	MC, Other Trips 2012 ²	2012 Total Trips	% of Need Met	Trip Gap (20%-total)	Gap Cost @\$2.35 ³	Gap Cost @\$3.70 ⁴
Fixed Route									
Citylink	5,205,000	1,041,000	350,604	221,886	572,490	11%	468,510	\$1,100,999	\$1,733,487
Community Connector	4,854,700	970,940	1,010,319	174,844	1,185,163	24%	0	0	0
Metro	9,600,000	1,920,000	1,464,643	193,517	1,658,160	17%	261,840	\$615,324	\$968,808
South Portland Bus	964,600	192,900	247,370	49,028	296,398	31%	0	0	0
Total	20,624,300	4,124,840	3,072,936	639,275	3,712,211	18%	730,350	\$1,716,323	\$2,702,295

Services	100% of Trip Need ¹	20% of Trip Need	Flex Rt Trips 2012 ²	MC, Other Trips 2012 ²	2012 Total Trips	% of Need Met	Trip Gap (20%-total)	Gap Cost @\$6.65 ⁵
Flex Route Urbanized Area								
ShuttleBus Local Service	2,619,300	523,860	112,432	173,329	285,761	11%	238,099	\$1,583,358
Total	2,619,300	523,860	112,432	173,329	285,761	11%	238,099	\$1,583,358

Maine Transit Services									
2012 Administrative and Operating Costs to Meet 20% of Transit Need (Continued)									
Services	100% of Trip Need ¹	20% of Trip Need	Flex Rt Trips 2012 ²	MC, Other Trips 2012 ²	2012 Total Trips	% of Need Met	Trip Gap (20%-total)	Gap Cost @\$4.61 ³	Gap Cost @\$9.18 ⁴
Flex Route Small Rural Cities									
Bath City Bus	318,900	63,780	13,661	14,055	27,716	9%	36,064	\$166,255	\$331,068
Brunswick Explorer	435,600	87,120	26,722	15,846	42,568	10%	44,552	\$205,385	\$408,987
Kennebec Explorer	1,530,600	306,120	64,329	158,305	222,634	15%	83,486	\$384,870	\$766,401
Sanford Transit	367,200	73,440	16,802	94,584	111,386	30%	0	0	0
Total	2,652,300	530,460	121,514	282,790	404,304	15%	164,102	\$756,510	\$1,506,456

Services	100% of Trip Need ¹	20% of Trip Need	Flex Rt Trips 2012 ²	MC, Other Trips 2012 ²	2012 Total Trips	% of Need Met	Trip Gap (20%-total)	Gap Cost @\$14.15 ³	Gap Cost @\$14.86 ⁴
Flex Route Rural									
DTI Year-Round	705,330	141,066	13,382	101,645	115,027	16%	26,039	\$368,452	\$386,940
West's Washington County	594,600	118,920	4,496	76,821	81,317	14%	37,603	\$532,082	\$558,781
Total	1,299,930	259,986	17,878	178,466	196,344	15%	63,642	\$900,534	\$945,721

Maine Transit Services							
2012 Administrative and Operating Costs to Meet 20% of Transit Need (Continued)							
Services	100% of Trip Need ¹	20% of Trip Need	Demand R Trips 2012 ²	% of Need Met	Trip Gap (20%-Trips)	Gap Cost @\$7.66 ³	Gap Cost @\$15.71 ⁴
Demand Response Rural County (Fixed, Flex Route not included)							
Androscoggin (rural only)	820,200	164,040	81,512	10%	82,528	\$632,164	\$1,296,515
Aroostook	1,260,600	252,120	278,172	22%	0	0	0
Cumberland (rural only)	696,000	139,200	102,655	15%	36,545	\$279,935	\$574,122
Franklin	410,100	82,020	90,833	22%	0	0	0
Hancock	n.a. data included in Flex Route Rural, DTI Year-Round						
Kennebec	600,690	120,138	87,688	15%	32,450	\$248,567	\$509,790
Knox	532,440	106,488	37,166	7%	69,322	\$531,007	\$1,089,049
Lincoln	191,250	38,250	23,178	12%	15,072	\$115,452	\$236,781
Oxford	772,800	154,560	178,367	23%	0	0	0
Penobscot (rural only)	933,900	186,780	235,299	25%	0	0	0
Piscataquis	276,930	55,386	43,029	16%	12,357	\$94,655	\$194,128
Sagadahoc (rural only)	167,100	33,420	12,791	8%	20,629	\$158,018	\$324,082
Somerset	766,540	153,308	136,829	18%	16,479	\$126,229	\$258,885
Waldo	540,000	108,000	115,009	21%	0	0	0
Washington	n.a. data included in Flex Route Rural, West's Washington County						
York (rural only)	549,300	109,860	90,264	16%	19,596	\$150,105	\$307,853
Total	8,517,850	1,703,570	1,512,792	18%	304,978	\$2,336,132	\$4,791,205

¹ Maine Transit Needs Analysis Technical Memorandum, 2014

² Locally Coordinated Transit Plans' "Other Trips 2012" includes demand response trips and may include intercity and commuter trips where applicable

³ Cost to bring service up to meeting 20% of need in 2012 using lowest cost figure within group

⁴ Cost to bring service up to meeting 20% of need in 2012 using average cost figure within group

⁵ Cost to bring service up to meeting 20% of need in 2012 using ShuttleBus cost figure

Table 12 is a summary of estimated costs for meeting 20% of transit needs, as shown in Table 11. The fourth column, Lowest Total Cost, is the cost of meeting transit needs using FY 2012 cost data from the lowest cost service in each category (Fixed Route, Flex Route Urbanized Area, etc.). The sixth column is the cost of meeting transit needs using cost data from the average cost of each category. Table 12 does not include capital costs.

Table 12: Maine Transit Services
Summary of 2012 Total Administrative and Operating Costs to Meet 20% of Transit Need

Maine Transit Services					
Summary of 2012 Total Administrative and Operating Costs to Meet 20% of Transit Need					
Service Type	Trip Gap (Trips)	Lowest Trip Cost	Lowest Total Cost	Average Trip Cost	Average Total Cost
Fixed Route	730,350	\$2.35	\$1,716,323	\$3.70	\$2,702,295
Flex Route Urbanized Area	238,099	\$6.65	\$1,583,358	\$6.65	\$1,583,358
Flex Rt. Small Rural Cities	164,102	\$4.61	\$756,510	\$9.18	\$1,506,456
Flex Route Rural	63,642	\$14.15	\$900,534	\$14.86	\$945,721
Demand Response Rural Co.	304,978	\$7.66	\$2,336,132	\$15.71	\$4,791,205
Total	1,501,171	\$4.86	\$7,292,857	\$7.68	\$11,529,035

The projected administrative and operating costs for meeting 20% of the need as shown in Table 12 are FY 2012 costs. In the fall of 2014, the costs for all services were updated using FY 2013 data. The detailed results of this cost update are summarized in Table 13. Overall, the FY 2013 costs do not vary significantly from the FY 2012 except for demand response costs for rural areas, which increased from \$15.71 per trip in FY 2012 to \$25.52 per trip in FY 2013. The increased costs are the result of FY 2013 being a transition year under the MaineCare brokerage system, and the loss of the Friends and Family MaineCare program to the brokerage.

Table 13: Maine Transit Services
Summary of 2013 Total Administrative and Operating Costs to Meet 20% of Transit Need

Maine Transit Services					
Summary of 2013 Total Administrative and Operating Costs to Meet 20% of Transit Need					
Service Type	Trip Gap (Trips)	Lowest Trip Cost	Lowest Total Cost	Average Trip Cost	Average Total Cost
Fixed Route	730,350	\$1.82	\$1,329,237	\$3.49	\$2,548,922
Flex Route Urbanized Area	238,099	\$7.02	\$1,671,455	\$7.02	\$1,671,455
Flex Rt. Small Rural Cities	164,102	\$4.12	\$676,100	\$6.59	\$1,081,433
Flex Route Rural	63,642	\$13.14	\$836,255	\$14.10	\$897,352
Demand Response Rural Co.	304,978	\$9.59	\$2,924,741	\$25.52	\$7,783,038
Total	1,501,171	\$4.95	\$7,437,788	\$9.31	\$13,982,200

4.6 Five-Year Transit Capital Replacement Costs to Maintain Existing Service

Capital costs are an important component of any transit service that offers transportation in agency vehicles. Capital costs have not been included in the previous tables because they vary significantly from year to year. Some agencies may have incurred very little in the way of capital costs in FY 2012, while others may have made significant capital investments. Including capital costs in the FY 2012 data would have distorted the data and made meaningful comparisons between agencies problematic at best.

Appendix F: 5-Year Transit Capital Replacement Costs by Provider 2014-2018 is a summary of MaineDOT's five-year capital replacement plan 2014-2018 which is based on vehicle replacement needs and estimated costs prepared by each of Maine's publicly funded transit providers. The total five-year capital replacement cost shown in Appendix F is \$43,172,324 million, or \$8.6 million annually. This includes capital costs for all types of services including intercity, fixed route, flex route, seasonal flex route services and demand response services.

As shown in *Table 14: 5-Year Transit Capital Replacement Costs by Year 2014-2018*, the projected replacement costs range from a high of \$13.4 million in FY 2017, to a low of \$4.1 million in FY 2018. MaineDOT estimates that there is \$21,237,195 in actual and estimated available funding, leaving an unfunded balance of \$21,935,129, or \$4.4 million annually.

Table 14: 5-Year Transit Capital Replacement Costs by Year 2014 - 2018

5-Year Transit Capital Replacement Costs by Year 2014 - 2018		
Replacement Year	Replacement Vehicle No.	Required Funding
2014	42	\$4,877,488
2015	66	\$9,960,929
2016	58	\$10,778,847
2017	67	\$13,436,511
2018	44	\$4,118,549
Total		\$43,172,324
Actual and Estimated Funding Available		\$21,237,195
Funding Needed		\$21,935,129

(MaineDOT)

The capital replacement costs contained in Table 14 should be viewed with care for a number of reasons:

- The projections do not account for policy changes that may be implemented as a result of the Maine Strategic Transit Plan 2025.
- The projections do not include adjustments in vehicle needs that may arise from the brokerage system for transporting MaineCare customers. For example, one regional provider, YCCAC, stopped providing transportation for the broker for York County (Logisticare) in February of 2014, resulting in excess vehicle capacity and a predictable need for fewer replacement vehicles. Similar changes in other areas of the state, if they occur during the 2014-2018 period, could impact the projections.
- The projections do not take into consideration new services that may be proposed between 2014 and 2018 and consequently need vehicles replaced before or on 2025.
- Many of the projections included an assumption that vehicles would be kept in service beyond the estimated useful lives of the vehicles.
- Some of the providers projected replacement costs for a 10-year time period, while others used a 5-year time frame. This may have had an influence on the costs that providers included in the five-year plan reflected in Appendix F.
- Some of the providers factored in an inflation factor when calculating future capital needs, while others did not.

Despite these cautionary limitations, Appendix F and Table 14 provide an overall “order of magnitude” estimate of capital costs for the five-year 2014-2018 time period. If the total of these five-year capital costs (\$43.1 million) are adjusted by not including FY 2014 capital replacement needs (\$4.9 million), the resulting figure (\$38.2 million) can be projected for the remaining six years of the Maine Strategic Transit Plan (2019-2025), resulting in an additional \$57.3 million for the six-year time period, and a total capital cost for the 10-year period 2015 – 2025 of \$95.5 million, or an average of \$9.5 million annually. Since the figure of \$95.5 million for the 10-year time frame of the Maine Strategic Transit plan is a rough estimate, subject to all of the cautions listed above, it has not been adjusted for inflation.

4.7 Additional Capital Resources for Increased Service to Address Trip Gaps

Additional capital will be needed to meet the 20% of transit needs in urban and rural areas. Where should those additional dollars be concentrated? Approximately two thirds (65%) of the state’s estimated total trip gap (1,501,171 trips) are in two categories – fixed route (49%) and flex route urbanized area (16%) and include a total of three providers: Metro and Citylink in the fixed route category, and ShuttleBus in the Flex Route Urbanized Area category. Another 11% of the state’s total trip gaps are in the flex route small cities category and include another three providers: Bath City Bus, Brunswick Explorer, and Kennebec Explorer. The service areas of these six providers account for 75% of the state’s estimated unmet trip need. *Table 15: Trip Gap Summary* shows where additional capital resources for increased service to address trip gaps would be needed.

Table 15: Trip Gap Summary

Trip Gap Summary				
Service Type	20 % of Trip Need	Trips Provided	Trip Gap (Trips)	% of State's Total Trip Gap
Fixed Route	4,124,840	3,712,211	730,350	49%
Flex Route Urbanized Area	523,860	285,761	238,099	16%
Flex Route Small Cities	530,460	404,304	164,102	11%
Flex Route Rural	259,986	196,344	63,642	4%
Demand Response	1,703,570	1,512,792	304,978	20%
Total	7,142,716	6,111,412	1,501,171	100.00%

A precise calculation of the capital investment needed is beyond the scope of this plan because it would necessitate a study of underperforming systems and how they could be improved and/or whether new systems should be supported. Moreover, the need for additional capital will change over time as MaineDOT shifts existing resources from “closed door” MaineCare type services to general public transit systems, and as brokers use more private vendors, rather than public agency vehicles, to transport their customers in some parts of the state.

In summary, an estimate of future capital needs can be determined by using a ratio of total FY 2012 administrative and operating costs (\$61,690,911) to vehicle costs (using average yearly vehicle replacement costs of \$9.5 million) and assuming a similar ratio between the lowest administrative and operating costs (\$61,690,911 plus \$7.4 million) to meet the 20% need and vehicle costs. This ratio results in total vehicle costs of \$10.6 million, or an additional \$1.1 million per year. Using similar ratios, the increase in administrative and operating costs (\$14 million) would result in total vehicle costs of \$11.7 million, or an additional \$2.2 million per year.

4.8 Summary of Chapter 4

Chapter 4 is a summary of provider revenues, an analysis of costs by service type, what it would cost to continue existing transit services to the year 2025, what it would cost to address unmet needs, and a review of capital needs. Major points of the chapter are:

- Intercity, fixed route, flex route, seasonal flex- route and demand response transit services had FY2013 revenues of \$62,111,223.
- The highest costs/trip were two intercity services: West's Coastal Connection (\$51.68 per trip) and the Cyr Bus Bangor to Caribou service (\$25.29 per trip). The lowest cost/trip was a fixed route provider, Community Connector (\$2.35 per trip).
- The cost to maintain intercity, fixed route and flex route services can be expected to increase from \$20 million in FY 2015, to \$23.2 million by 2025, an increase of 16%, assuming an annual inflation rate of 1.5%.
- In FY2013 it would have taken between \$7.4 million and \$13.9 million additional monies to meet 20% of transit needs throughout the State.

The next chapter, *Surveys*, examines responses from a statewide telephone survey, a State Plan on Aging survey, and a survey for another public transportation project in eastern Maine.

CHAPTER 5.

SURVEYS AND FINDINGS

For more information:

Task 10: Customer Surveys

5.1 Introduction

In addition to understanding the hypothetical need and demand for public transportation described in the preceding chapter, it is also important to learn as much as possible about Mainers' attitudes about public transportation. A state-wide telephone survey was conducted for Maine Strategic Transit Plan 2025. A survey of passengers on Maine public transportation and a customer survey of transit providers in the state were also conducted. The plan is also informed by two other recent surveys. One was used in developing the State Plan on Aging, and the other for another public transportation project in eastern Maine.

5.2 Statewide Telephone Survey Concerning Public Transportation

In October and November of 2013, a sixty-eight question telephone survey concerning attitudes about public transportation was conducted on behalf of MaineDOT. The survey reached a random sample of land lines and cell phones users, with 41% of the responses from cell phone users. Four hundred surveys were conducted statewide; the overall response rate of 49% was above the typical rate of 18%. It is believed this high response rate was because the survey was described as under the auspices of MaineDOT. Responses were weighted by age, gender, and region of the state where respondents lived to ensure the demographic mix of respondents matched similar population percentages in the 2010 census.

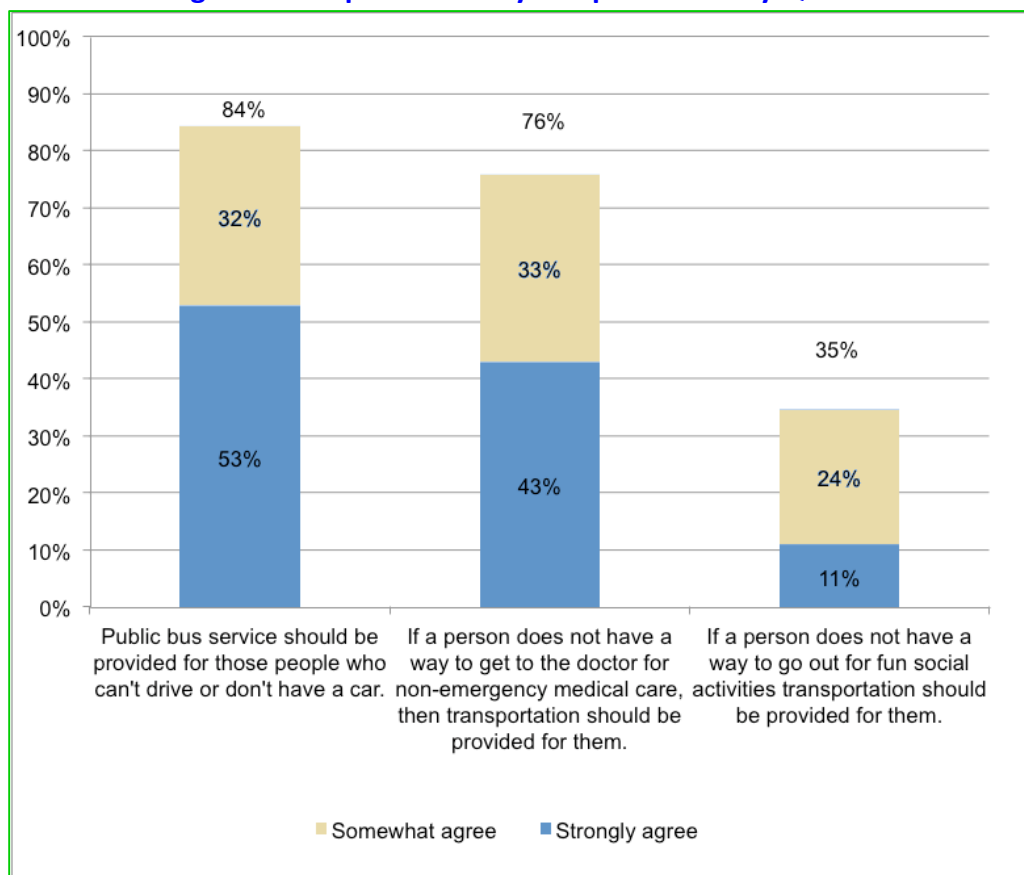
In terms of margin of error, the overall sample contains 400 responses which results in a 95% confidence rate, plus or minus 5%. However, some questions have a larger margin of error because of the number of responses for the particular question. The margin of error for some of these subsets went as high as 29%. This means that results for some of the questions are not reliable. For purposes of this report, the significant results and findings are highlighted here:

1. **Mainers use private vehicles for the vast majority of their travel.** Most people (97%) have a drivers' license and access to a vehicle. 93% of households have a vehicle. The average was 2.2 vehicles per household. There was little difference in vehicle accessibility

by age. There is a difference by income for access to vehicle. Low income households (less than \$30,000 per year) indicated they had less access to a vehicle.

2. **Lack of transportation in a household resulted in some being unable to access work, shopping, medical services and social activities.** (5% to 8%) Two-thirds of the 5-8% respondents report the reason for this is that the vehicle in the household was not available at the time, or was unreliable.
3. **Mainers rarely use public transportation and therefore know little about how much there is in the state, or who provides it.** A very small number of respondents reported using local bus service, a number so small as to be unreliable.
4. **Despite the above responses, Mainers strongly support the availability of local bus service for all.** 68% said it should be a public service like police and fire departments. And 84% agreed public bus service should be provided to people who cannot drive or do not have a car.

Figure 9: Responses to Key Telephone Survey Questions



5. **Mainers agree that bus service should not be geared only to those who can't drive or don't have a car, but also be an available transportation option for vehicle owners.** 21% thought that it should be geared to low income persons, the elderly, people with

disabilities, and young people who cannot drive; 91% agreed that it should be available to a person who owns a car so they have an option to ride the bus instead of driving the car.

6. **Even so, Mainers have priorities as to when transportation should be provided to people without transportation.** 76% agree that it should be provided for non-emergency medical care, but only 35% agree that it should be provided for social activities.
7. **Mainers agree that some or all of the cost of transportation should be paid by the user.** 69% believe the cost of transportation to medical care should be based on the person's ability to pay, while only 30% were in favor of this type of payment for social activities.
8. **A large majority of respondents believe that with respect to the choices given about funding transportation, roads and bridges are in the most need of support with public money.** 80% of respondents listed roads and bridges as #1 or #2 in terms of funding priority when asked to prioritize transportation activities that needed funding; 47% ranked local bus and van service the same way. Interestingly, 29% suggested that none of the transportation modes are in need of public money. (the others were bicycle and walking paths -20%, passenger rail – 14%, and ferries – 4%)
9. **Mainers agree that it is the state government's role to help fund intercity service and find a way to help pay for local bus service.** 65% agree about state's role for service between urban areas of the state; 63% agree about that role for local service. Half of the respondents agree that private companies should provide the service itself, not the government.
10. **A majority of Mainers do not want an increase in taxes to support local bus service.** 71% of respondents favored a lottery, and slightly over half agreed that it should come from the state's operating budget or general fund; an increase in bus fares was cited at the same rate. Essentially, respondents did not favor funding methods that take money out of their pockets. There was support for options paid for by "somebody else."
11. **Most Mainers agree that a local bus service is good for a community.** 81% agree that availability of a local bus service is an incentive and a good reason for people to move to an area. 77% agree that it is a reason to locate a business in a community.

Taken together, the key findings and supporting details from the telephone survey offer conclusions that are useful for the development of recommendations for Maine Transit Strategic Plan 2025, in particular the specific actions to implement the plan:

- I. Despite high reliance on personally owned vehicles for transportation, there is wide support to expand public transportation options for everyone.

- II. While a majority of Mainers oppose tax increases to fund public transportation, some combination of a lottery, state general fund, and higher fares for improved service could draw majority support.
- III. Based on experience in other states, expanding and funding public transportation can be done by developing a good plan that the public can understand and support, and that policy makers and elected officials can champion.

The statewide telephone survey done specifically for this project is not the only survey research data available. Other recent studies and reports have also been helpful in informing the project and a discussion of other relevant surveys and plans follow.

5.3 Survey of Passengers on Maine Public Transportation

In January 2014 a survey was conducted among 649 randomly selected riders using bus, van and ferry service on each one of Maine's 21 public transit systems. This included passengers using fixed route bus or ferry, flex route, and demand response services. The data reported for the sample are within plus or minus 3.8% of that would be found if all passengers using public transit in Maine completed surveys. (Mildner & Robertson, 2014, p. 3)

The survey assessed the reasons for using public transit; how often the rider used public transit; factors that were important to riders when using public transit and satisfaction with these factors; the likelihood of recommending public transit to family and friends; and factors about public transit that riders would change.

The survey results are used to inform the goals and objectives in MaineDOT's strategic transit plan. The key results and findings developed by the study team are:

1. Passengers on public transportation in Maine had substantially lower incomes and were older than the general population of the state.
2. Almost one half of the passengers on public transportation did not have a vehicle available to them at any time.
3. Public transportation riders in Maine rode transit primarily to go to or from work, shopping, or medical appointments, and significantly less so for visiting family and friends, school, recreational activities, or running errands.
4. People taking public transportation in rural Maine were more likely to be going to or from shopping or medical appointments; 45% of people in urban areas were going to or from work.
5. There were noteworthy yet not surprising differences in the demographics and primary purpose of the trip among fixed route, flex route, and demand response passengers.

6. Passengers on public transportation in Maine were very satisfied with the service they received, and most would recommend its use to family and friends.
7. Even passengers who were very satisfied with service identified factors where service can be improved.
8. There were differences in the importance and satisfaction levels with the factors of service such as cleanliness and friendliness of drivers among fixed route, flex route, and demand response passengers.
9. Riders with fewer transportation options look for more from their transit service, but were also more appreciative of and satisfied with what they do receive.

Similar to the statewide telephone survey, the rider survey is useful in developing goals and objectives for the strategic transit plan. There is no outstanding data or findings in the survey results (with the possible exception that “safe driver” is the highest in importance across all types of service). However, there are noteworthy insights from the data that provide awareness as to the impact certain goals and objectives may have on individual Mainers and their communities. The following are implications to be considered when determining the type of transit services that can be envisioned and supported in the strategic transit plan:

- I. Most important, any future decision-making and planning will need to factor in key differences between rural and urban areas, the demographics of the population to be served, and the types of services that will be considered.
- II. With more than two-thirds of all riders having household incomes of less than \$25,000, the cost of a fare to ride public transportation is a factor to consider when designing public transportation services.
- III. Based on the importance of safe drivers to all survey respondents for all types of services, as well as the number of positive comments about individual drivers, driver selection, training and re-training should be a major component of all services being planned or currently in operation.

5.4 Survey of MaineDOT Transit Unit Customers

The Maine Department of Transportation, Bureau of Planning, Multimodal Planning Division conducted a Customer Survey of transit providers in the state. The purpose of the survey was to assess the services and activities of the Division to help guide future activities. Twenty surveys were returned. The responses to selected questions of particular interest to the research team were analyzed. These questions focused on communication among MaineDOT staff and consultants and satisfaction with MaineDOT’s work on tasks relevant to providers.

Analysis of the responses to the survey underscore the idea that communication is a key to management. Transit managers who had more frequent contact by phone and e-mail with the Bureau of Planning+ and with the Bureau's consultants were more likely to report that they thought there were appropriate amounts of transportation in rural areas, urbanized areas, and for elderly persons. The communicative transit managers were also satisfied with the levels of coordination, capital projects and vehicle replacement, and technical and management assistance. Face to face contact with people from the Bureau of Planning did not influence telephone or e-mail contact but face to face contact with Bureau of Planning consultants did influence the amount of telephone and e-mail contact transit managers had with the consultants.

The responses to the survey and the analysis indicate that frequent communication between transit managers and the Bureau of Planning and transit managers and the Bureau's consultants lead to a better understanding of transit in the state as expressed by respondents' belief that there are appropriate amounts of transportation in various areas of the state and appropriate amounts of support in terms of coordination, capital projects, and assistance. With this in mind, efforts should be made to continue and improve telephone and e-mail communications and provide opportunities for transit managers to meet Bureau consultants.

The telephone survey, rider survey, and customer survey described above were conducted specifically for the Strategic Transit Plan. Other recent studies and surveys in Maine are germane and are described in the following sections.

5.5 Surveys for State Plan on Aging

Surveys were used in drafting the needs assessments for the *State Plan on Aging October 1, 2012 – September 30, 2016*, which was signed by the Governor on September 6, 2012. Important themes developed that must be addressed if Maine residents will be able to age well in their homes and communities. The theme concerning transportation is cited in its entirety.

“Transportation is a critical support for people in rural Maine as evidenced by the responses to the needs assessment. The statewide survey demonstrated that 83% of residents over 65 are completely independent in relation to transportation. This number dips to 79% for people whose income is under \$30,000. For people who use State Funded Home Care Services, only 65% reported they could “always” get to the doctor when needed and only 36% percent could “always” get to the grocery store when needed. For those who are dependent on others to meet their transportation needs, 90% of them rely on friends or family members to meet their needs. When people cannot travel outside of their homes, they

become increasingly isolated and depressed. This dependency on others also makes them targets for abuse and neglect.

Both consumers and providers agree that Maine needs to address the issue of transportation. Interestingly, focus group participants seemed to prefer public transportation over a privately run volunteer program. It seems critically important to design solutions locally to ensure that future public transportation design is as accessible as possible. With no additional funding to create new or bolster existing transportation systems, communities will have to find low cost solutions to providing transportation in partnership with the state and federal government.” (Maine Office of Aging and Disability Services and Maine Department of Health and Human Services page 14)

Maine Office of Aging and Disability Services Goals and Objectives for 2012-2016 contains the following goal, objective and strategies regarding transportation:

Goal 3: Enable older adults to remain safely in their community ensuring a high quality of life for as long as possible through the provision of home and community-based services, including supports for family caregivers.

Objective 7: Increase access to and utilization of housing, transportation, and direct care services by aging adults, living in both rural and urban areas of the State.

- Strategy 7.1: Partner with DOT and regional transportation providers to find creative solutions to provide transportation services to rural, aging adults.
- Strategy 7.2: Expand access and utilization of publicly funded transportation in order to address rural isolation of our aging persons in need of urban-based services.

5.6 Survey on Public Transportation in Four Rural Counties for Eastern Maine Development Corporation

While the preceding discussion is focused on the elderly, another recent report from rural regions of eastern Maine expands the focus to include, in addition to the elderly, the general public such as workers, tourists, and students. The Eastern Maine Development Corporation (EMDC) sponsored an FTA-funded project, *“Linking the Rural Regions of Four Counties in Maine to Enhance Transportation Opportunities and Improve Quality of Life.”* The four counties are Penobscot, Piscataquis, Hancock, and Waldo. The project first gathered information using three methods: a random population survey, outreach to community groups, and focus groups. It then proffered recommendations and action steps based on a review of the information with the purpose of enhancing existing or developing new transportation options in rural communities.

The prime purpose was to increase access from rural areas to greater Bangor. The interim report is focused on eastern Maine, and observes that there is no cookie cutter transportation solution applicable to every community, nor is there a single solution that will work for everybody. (Eastern Maine Development Corporation & Tom Crikelair Associates)

For purposes here it is useful to look at what some of the data in the EMDC interim report shows with respect to the need for transportation solutions. It is important to reiterate that the prime purpose of the EMDC report was to make recommendations concerning connections between rural areas and an urbanized area. Therefore, many of the questions are geared to separating out “commuters” – people going to work or college – from people who are traveling for non-work purposes to county hubs or urban areas. Many of the questions are geared toward identifying those populations and their respective attributes. It is not surprising that much of the survey data and information is similar to what was found in the statewide telephone survey conducted for the strategic planning process. Highlights from the findings of the EMDC survey:

- Nearly all households owned one or more vehicles. (App. A, p. 58)
- Close to 80 percent of commuters to work or school were reported to “always” drive alone in car, truck or van. (App. A, p. 18)
- Close to 23 percent of households experienced some kind of transportation problem and for households with incomes under \$25,000 that figure was 38 percent. Of those indicating that there had been transportation problems in the past month, “gas too expensive” was the most frequently checked problem, followed by “unreliable vehicle.” (App. A, p. 58)
- 98.2% of the commuters never use public transportation. (App. A, p. 18)
- Excluding commuters to work or school, or transporting children to school or school activities, the average number of trips per month **to the county hubs**, by type of trip and destination for all four counties was:
 - Grocery shopping 4.98 trips per month
 - Other shopping 3.69 trips per month
 - Medical/dental/social service 1.91 trips per month
 - Entertainment/family/friends 3.20 trips per month
 - Other 1.22 trips per month

(EMDC, 2013, Appendix A)

As noted earlier, the information, concepts, ideas, and recommendations from the EMDC report are helpful as a model for the strategic policies, in particular recommendations for connecting rural areas to small urban hubs or urbanized areas.

Survey data, key findings, and conclusions drawn from three recent sources are in harmony with each other. The statewide telephone survey conducted for the Maine Strategic Transit Plan 2025, the State Plan on Aging October 1, 2012 – September 30, 2016, and Linking the Rural Regions of Four Counties in Maine to Enhance Transportation Opportunities and Improve Quality of Life affirm the importance of transportation in the lives of Mainers.

5.7 Persons with Disabilities in Maine

Disability in Maine: 2002, prepared by Monroe Berkowitz and Todd Honeycutt, Rutgers University, New Jersey, projected that Maine’s population of persons with disabilities is expected to increase 27% during the years 2000 to 2025. The report attributes this increase to the Baby Boomer generation as that population group moves into older age groups in which the prevalence of disability is greatest and the demand for services increase.

A plan for helping to meet those demands is *The State Plan for Independent Living (SPIL) for Maine for 2014-2016*, prepared for the Maine Department of Labor - Division of Vocational Rehabilitation in 2013. The purpose of the plan is to “ensure the existence of appropriate planning, financial support and coordination, and other assistance to appropriately address, on a statewide and comprehensive basis, the needs in the State for:

- The provision of State independent living services;
- The development and support of a statewide network of centers for independent living;
- Working relationships between programs providing independent living services and independent living centers, the vocational rehabilitation program established under Title I, and other programs providing services for individuals with disabilities.”

The Maine Statewide Independent Living Council (SILC) is one of the organizations that is authorized to jointly develop, sign and submit the SPIL on behalf of the State. SILC collaborates with disability related organizations including: the Maine Developmental Disabilities Council, the Maine Disability Rights Center, the Advocacy Initiative Network of Maine, Speaking Up for Us of Maine, the Maine Center on Deafness, the IRIS Network, NAMI Maine and other groups. The primary goal of the SILC is to improve the lives of people with disabilities in Maine, focusing on six core areas identified in five forums and an online/paper survey. An area needing improvement is mobility. Individuals with disabilities have identified transportation as an area that presents problems for independent living. (Housing, emergency planning and preparedness, community-based living, economic self-sufficiency, and assistive technology are the other core areas.)

To help improve mobility for persons with disabilities and complete *The State Plan for Independent Living (SPIL) for Maine for 2014-2016*, the Maine SILC is:

- Increasing links to transportation resources on website
- Encouraging people with disabilities to attend transportation forums
- Collaborating with partners to explore ways to improve transportation options via vouchers or other avenues.

Persons with disabilities in Maine and elderly persons in Maine who need help with transportation so they can live in their own homes and stay in their communities face a similar set of circumstances: a large, rural state in which needed services are sometimes difficult to obtain.

5.8 Summary of Chapter 5

This chapter examined Mainers' attitudes about public transportation through a state-wide telephone survey, a survey of passengers on Maine public transportation, a customer survey of transit providers in the state, a State Plan on Aging survey, and a survey about public transportation project in eastern Maine. Main points of this chapter are:

- Mainers use private vehicles for the vast majority of their travel, rarely use public transportation and therefore know little about how much there is in the state, or who provides it.
- Mainers strongly support the availability of local bus service for all and agree that a local bus service is good for a community.
- Mainers agree that it is the state government's role to help fund intercity service and find a way to help pay for local bus service. But a majority of Mainers do not want an increase in taxes to support local bus service.
- While a majority of Mainers oppose tax increases to fund public transportation, some combination of a lottery, state general fund, and higher fares for improved service could draw majority support.
- Riders with fewer transportation options look for more from their transit service, but were also more appreciative of and satisfied with what they do receive.
- Future decision-making and planning will need to factor in key differences between rural and urban areas, the demographics of the population to be served, and the types of services that will be considered.
- Transit managers who had more frequent contact by phone and e-mail with the Bureau of Planning and with the Bureau's consultants were more likely to report that they

thought there were appropriate amounts of transportation in rural areas, urbanized areas, and for elderly persons.

- The Maine Office of Aging and Disability Services has as a goal regarding transportation: Enable older adults to remain safely in their community ensuring a high quality of life for as long as possible through the provision of home and community-based services, including supports for family caregivers.
- Persons with disabilities in Maine and elderly persons in Maine who need help with transportation so they can live in their own homes and stay in their communities face a similar set of circumstances: a large, rural state in which needed services are sometimes difficult to obtain.
- The four counties of Penobscot, Piscataquis, Hancock, and Waldo had close to 23 percent of households experienced some kind of transportation problem and for households with incomes under \$25,000 that figure was 38 percent.

This chapter discussed the responses from the people of Maine about how getting where they need to go is important to them. Up to this point, the focus has been on the State of Maine. It is helpful to look beyond the state's borders and look at how other states are meeting the mobility needs of their citizens. The next chapter, *Peer State Review and Best Practices*, looks at performance measures.

CHAPTER 6.

PEER STATE REVIEW AND BEST PRACTICES

For more information:

Task 16: Alternatives and Best Practices and Task 17: Peer State Funding

6.1 Introduction

The Strategic Plan 2025 is based on research of ideas and practices not only in Maine, but also in other states. A wide range of practices exist in other states, and FTA authorizing rules and regulations allow for states to create programs which fulfill the federal intentions yet are tailored to individual state conditions. A review of existing performance measures and standards are identified and compared among the peer states. Another purpose of this chapter is to identify and initiate performance measurement that can be used to identify “dashboard indicators” for public transit. Also, this chapter reviews the FTA requirement for coordination of transportation service among agencies that receive federal funds for transportation. This chapter concludes with a review of funding sources from peer states and around the nation for public transit and their applicability to the State of Maine.

6.2 Requirements for Performance Measures

Moving Ahead for Progress in the 21st Century (MAP-21), the current funding authorization for transportation including public transit, requires transit-related performance measures. One is related to a broad transit safety program wherein all recipients of federal transit funding are required to establish a comprehensive safety plan based on set criteria. Waivers may be available for smaller systems. MAP-21 also requires a national transit asset management system to monitor and manage public transportation assets. This will require recipients and sub-recipients of Federal Transit Administration grant funds to develop capital asset inventories and condition assessments, including objective standards for measuring the condition of capital assets. “State of good repair” will be defined and performance measures will be developed based on the definition. (APTA pp 16 – 17)

At the state level, legislation requires MaineDOT to “...establish customer service levels related to safety, condition and serviceability appropriate to the priority of the highway, resulting in a system that grades each highway as Excellent, Good, Fair, Poor or Unacceptable.” With respect to transit, MaineDOT must, “By 2015, develop and implement a similar asset priority and customer service

level system of measurement for all major freight and passenger transportation assets owned or supported by the department, including capital goals.” In addition, “The department shall report to the joint standing committee of the Legislature having jurisdiction over transportation matters by March 1st of each odd-numbered year quantifying progress realized and time that has elapsed since the goals were established. The department shall recommend any remedial actions, including additional funding or revisions to the goals that the department determines to be necessary or appropriate.” (23 MRSA §73)

6.3 Service Standards, Performance Measures, and Performance Levels

It is important to define what is meant by the terms service standards, performance measures, and performance levels:

- Service standards identify levels of service for a transit system such as the number of days a route operates, the number of hours of service per day, headways (frequency of service on a route), connectivity between other modes of transportation, etc.
- Performance measures quantifiably assess the efficiency and effectiveness of the transit system such as the number of passenger trips per mile, operating expenses per mile, number of passenger trips per hour, and number of passenger trips per mile.
- Performance levels are a grading scale for a particular performance measure, such as the familiar “A” to “F” scale (Danaher. *TCRP Report 100: Transit Capacity and Quality of Service Manual*, Part 3, pp. 3-1 & 3-2). In the case of MaineDOT, the five-level scale of Excellent, Good, Fair, Poor or Unacceptable is used.

6.4 Peer States Identified for Benchmarking

For purposes of this study the research team consulted with MaineDOT to identify “peer states” for comparison. The Technical Memorandum for Task 17: “Other States Funding” provides an in-depth process for narrowing down a list of peer state candidates. MaineDOT uses benchmarking on performance measures related to roadways with Idaho, New Hampshire, North Dakota, and Vermont. (Scott. Telephone call) The study team included three other peer states of interest: Montana, West Virginia and Wyoming. This group of seven peer states is used in the study for examining service standards and performance measures

6.5 Peer State Performance Measures

FTA grant recipients already supply information that can be used to develop performance measures. The National Transit Database (NTD) collects data such as passenger trips, operating costs, capital costs, farebox revenue, revenue miles, revenue hours, and much more – everything needed to calculate performance measures and establish performance levels.

All states' transit units submit annual NTD reports for §5311 sub-recipients who operate exclusively in rural areas. §5311 sub-recipients who also receive urban funds do not report through the state transit unit, but do so directly to the NTD. Almost all of the peer states do use performance measures, although some do so more formally than others. For example, grant applications often ask for most recent data such as cost per trip, cost per vehicle mile, or other performance criteria ostensibly to be used in evaluating grant requests.

In the case of Maine, baseline information that could be used to calculate performance data, much of which was already being collected for NTD reporting purposes, had long been an important component of the Biennial Operations Plan (BOP), now the Locally Coordinated Plan. Transit providers, including those that were direct recipients of FTA funds, reported raw data every two years. The data included annual operating expenses, administrative expenses, revenues, federal, state, and local operating assistance, farebox revenue, vehicle hours, vehicle miles, and passenger trips. Transit services were reported on separately from social service transportation in these areas. The data was also broken down by the type of service – fixed route, deviated fixed route (flex route), demand response, vanpool, subscription, and other.

Maine is rich in raw data from public transit providers that could have been used for performance measurement purposes. Annual and biennial reporting frequencies are inadequate for timely decision-making and responsiveness to legislative and executive level inquiries.

Four states require monthly reports on service data, operating costs, passenger trips, and other pertinent information which is basically a monthly version of the NTD reporting information. Several states tie the monthly NTD-style reports to submission of billing invoices. Three states require quarterly reporting. Maine receives this information annually in time to submit NTD reports. More frequent reporting allows states to have up-to-date information for performance measurement.

Idaho, Montana, Wyoming and Vermont use performance measures more so than the other states. Until recently Idaho's public transit unit was in the Division of Transportation Performance. The *2nd Annual Public Transportation Performance Report 2013* dated March 5, 2014, presents three key performance indicators (measures) by type of service for every sub-recipient:

- Number of passenger trips,
- Operating costs per passenger trip, and
- Operating cost per vehicle revenue mile.

Idaho also describes the change in these measures from the previous year. The sub-recipient data is aggregated into statewide performance measures. The statewide performance measures also add:

- Passenger trips per capita,
- Passenger trips per vehicle revenue mile,
- FTA operating subsidy per passenger trip,
- Number of fatalities and
- Number of incidents per 1 million vehicle revenue miles.

Montana uses an in-house software application called the Public Transportation Management System (PTMS) to collect data online in a format similar in style and content to the NTD report. Sub-recipients log into the system online and enter their quarterly reporting data. There is an informative user manual with a page-by-page screenshot of what is entered, instructions, and other guidance. Although it doesn't load data directly into the NTD report, PTMS can be queried and puts it in an easy-to-use format.

Wyoming has conceptually introduced "output measure factors" into the grant award process. Sub-recipients will be "held harmless" at a percentage of a base year's amount, with additional funding added at a rate dependent on the providers' output measures.

Vermont is particularly progressive and a leader among the peer group states in use of performance measures. Starting in 2007, nationwide peer groups were developed for defined categories of service provider to establish benchmarks for each category of service. Other services categories have been added. In categories with limited nationwide data, Vermont transportation provider averages are used to establish the benchmarks. Sub-recipients submit monthly Service Indicator Reports (SIRs) in Excel spreadsheets that include service data, total costs, number of trips, and farebox revenue. This data is collected at the route level, not just the agency level. The information is tracked and compared during the year and used at the end of the fiscal year for a statutorily mandated transit performance review to the legislature. Because it is "real data" from the providers that the providers validate, the transit unit has had positive experience with using it for decision-making.

The reports are straightforward and show an agreed upon state of performance. They are effective in identifying outliers in performance and are not punitive. For example, if one route at an agency is underperforming, the transit unit will work with the provider to suggest ways to improve it such as marketing, schedule or route changes, or frequency of service. The transit unit also compares

trends among similar categories of service and overall trends among service providers in the state. The data-driven methodology gives a strong foundation for decision-making and provides compelling rationale when difficult choices are made. The Vermont Agency of Transportation *Public Transit Route Performance Reviews - Annual Report for State Fiscal Year 2013* dated January, 2014 is the most recent report.

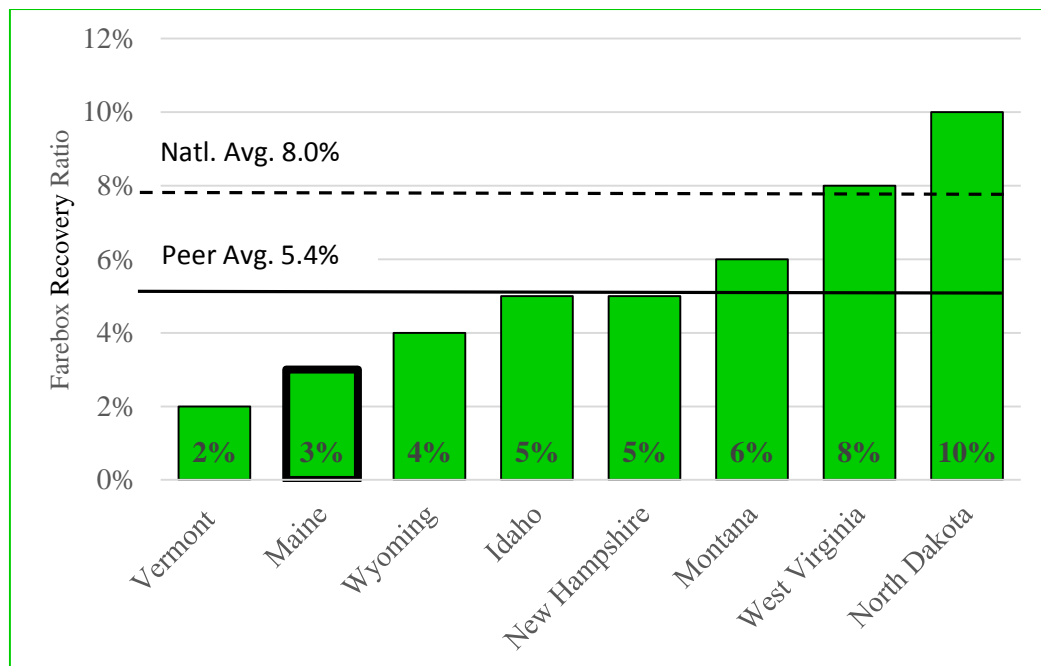
6.6 Sample of Comparisons among Peer States

The Rural Transit Fact Book 2014 (Fact Book) is prepared for the U.S. Department of Transportation at North Dakota State University, Upper Great Plains Transportation Institute, Small Urban and Rural Transit Center (SURTC). This section compares data about the peer states collected from the National Transit Database (NTD) that is used by the SURTC in preparing the Fact Book.

This section also provides an introduction to the types of graphs that can be created with data from the Fact Book for comparison and analysis. The statistics are aggregated by state with data from the §5311 sub-recipients based on the assumptions noted above. The purpose of these examples is not to analyze and explain why the results are what they are, but rather simply demonstrate what rudimentary “dashboard indicators” for public transit can look like. *Figures 10 -15* on the following pages show comparisons among peer states. Note that on all of the measures Maine transit providers are below the national and peer group averages except on operating expense per revenue vehicle mile where it is above the peer group and national average. This indicates that there are opportunities for discovering service delivery improvements for Maine transit providers.

Figure 10: 2012 Median Agency Farebox Recovery Ratio shows the median agency farebox recovery ratio. As noted, the NTD does not separate cost data by service category, meaning that this is the total percentage calculated from both demand-response service and fixed route service ridership and cost data. As shown Maine is below both the national average and peer state average for farebox recovery.

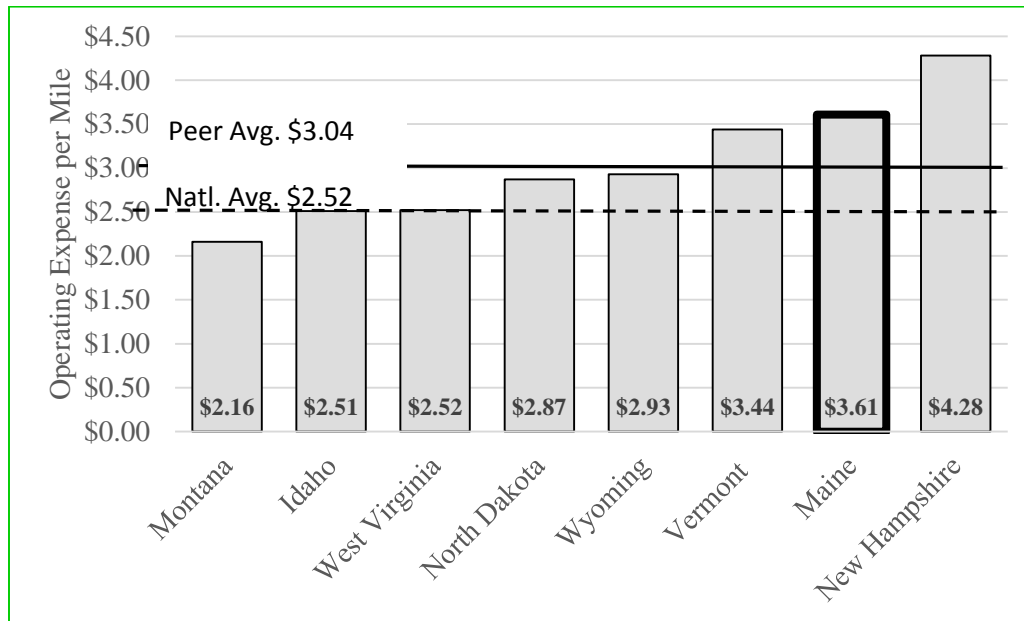
Figure 10: 2012 Median Agency Farebox Recovery Ratio



(Data Source: Table 37. Rural Transit Fact Book 2014, p. 31)

Figure 11: Operating Expense Per Revenue Vehicle Miles shows operating expense per mile, again combining both demand-response and fixed route data. Operating expense per mile is one of the performance measures Idaho uses. And similar to the farebox recovery ratio in Figure 11 Maine operating expenses per revenue mile show performance on the undesirable side of the data with an average cost of \$3.61 compared to a national average of \$2.52 and a peer group average of \$3.04.

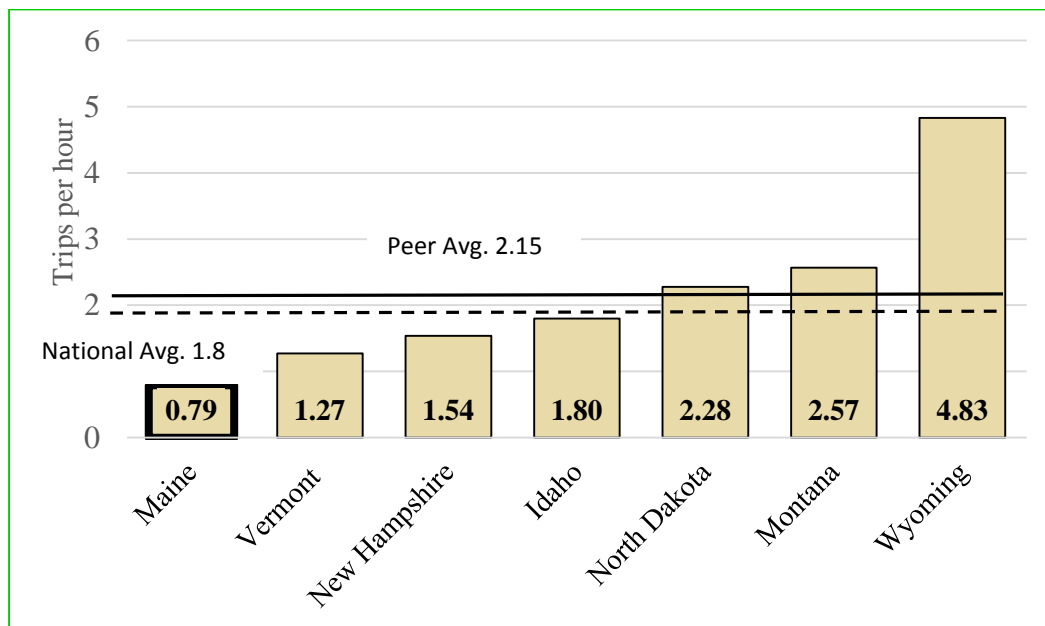
Figure 11: Operating Expense per Revenue Vehicle Mile



(Data Source: Table 37. Rural Transit Fact Book 2014, p. 31)

Figure 12: Demand-Response Passenger Trips Per Hour shows the average number of demand-response trips per hour. Trips per hour is considered a more insightful measure than trips per mile for demand-response service. This performance measure is one of the three used by Vermont for all service categories except urban. [West Virginia is absent from the graph because all of the trips were reported as fixed route service.] Maine's systems at .79 trips per hour are at the low end of productivity for trips per hour and below the national average of 1.8 trips per hour.

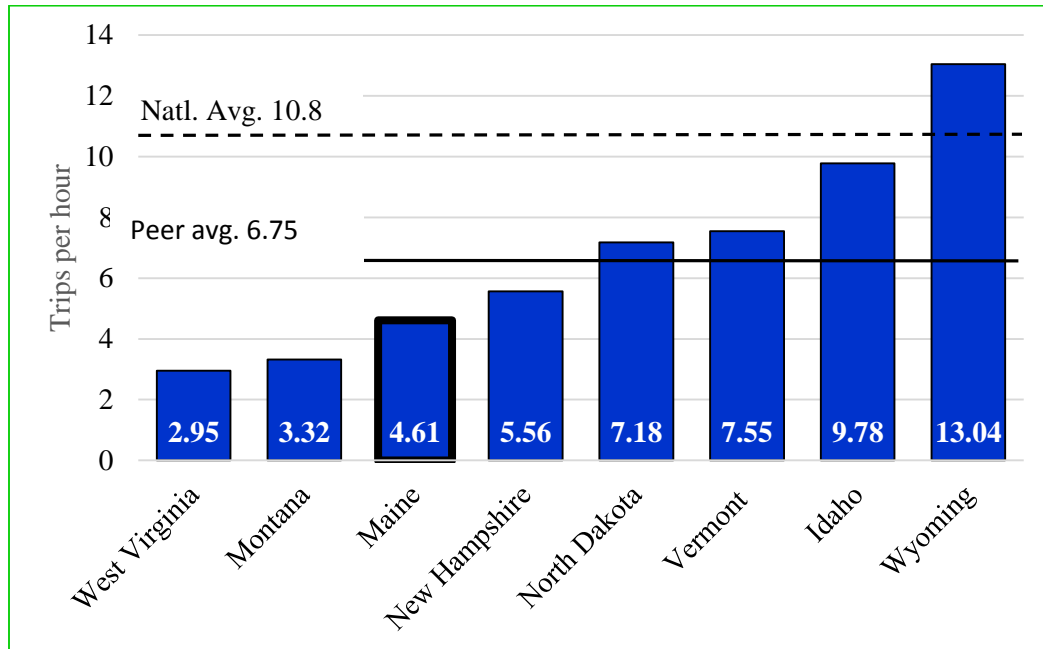
Figure 12: Demand-Response Passenger Trips Per Hour



(Data Source: Table 37. Rural Transit Fact Book 2014, p. 31)

Figure 13: Fixed Route Passenger Trips Per Hour displays the average number of fixed route trips per hour among the peer states. Maine is below the national and peer state averages at 4.61 passengers per hour for fixed route services.

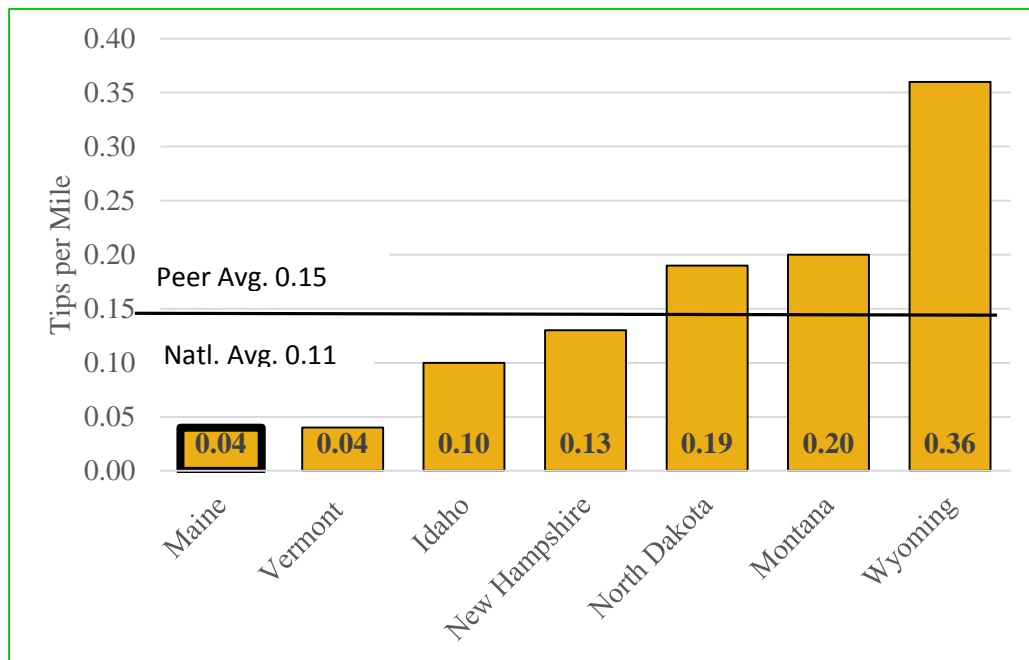
Figure 13: Fixed Route Passenger Trips Per Hour



(Data Source: Table 37. Rural Transit Fact Book 2014, p. 31)

Figure 14 reflects the median agency demand-response trips per mile. [Again, West Virginia reports all of its trips as fixed route or deviated fixed route.] Maine is at the low end of the peer group and below the national average at .04 passenger trips per revenue vehicle mile.

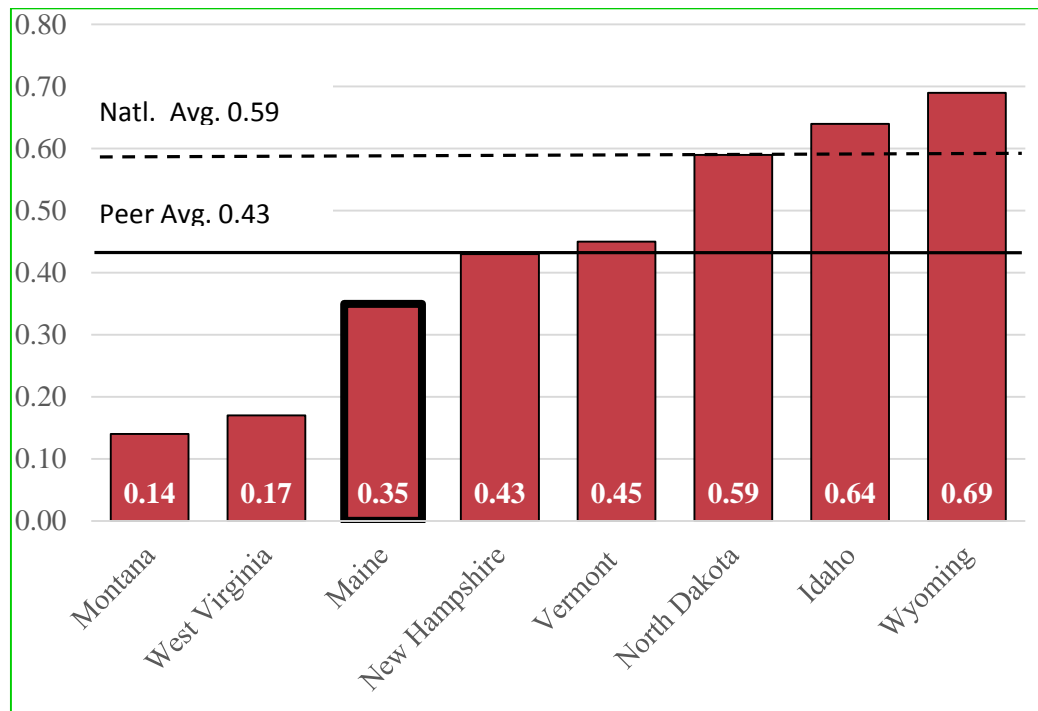
Figure 14: Demand- Response Average Number of Passenger Trips per Revenue Vehicle Mile



(Data Source: Table 25 Rural Transit Fact Book 2014, p. 20 and Table 37, p. 31)

Figure 15: Fixed Route Average Number of Passenger Trips per Vehicle Revenue Mile shows the average number of fixed route trips per vehicle mile, one of the three performance measure used by Vermont for the urban service category. Maine fixed route transit providers are also below the national average and peer state average at .35 passenger trips per vehicle revenue mile.

Figure 15: Fixed Route Average Number of Passenger Trips per Vehicle Revenue Mile



(Data Source: Table 25 Rural Transit Fact Book 2014, p. 20 and Table 37, p. 31)

When reviewing all the performance data presented above it becomes clear that Maine systems are performing at levels below peer states and the national average. This indicates probable possibilities for improving efficiency and effectiveness of the existing services.

6.7 Establishing Quantitative Benchmarks

An important feature in Vermont's performance review process is that it calculates quantitative benchmarks for each service category. Performance benchmarks are identified in seven service categories:

1. Urban
2. Small town
3. Demand response
4. Rural
5. Rural commuter
6. Tourism
7. Volunteer driver

When Vermont started doing performance reports they selected comparison groups of agencies from nationwide NTD data, and used the averages from those comparison groups to create the performance levels, or benchmark, for each service category. That process continues. For example, NTD data from 19 agencies are used to calculate the performance level standards in the urban category. The list includes comparable transit agencies from Colorado, Indiana, Illinois, Michigan, Minnesota, and others, including the Greater Portland Transit District in Maine. Additional service categories were added since 2007 to ensure “apple-to-apple” comparisons within the category. Three service categories use data based on Vermont state averages, and the tourism category uses both rural NTD data and data collected directly from comparison peers.

Vermont has established two levels of performance in each service category: “successful” and “acceptable.” The “successful” standard for each service category is the peer average. The only exception is for volunteer trips; 80% of the peer average is the successful standard. For all service categories, the “acceptable” standard is set at either half or twice the “successful” amount, depending on the performance standard being evaluated. Vermont also established a 20% standard measure for local share. That is, by state policy agencies are expected to contribute at least 20% of operating costs from sources other than the state or federal governments. (Vermont Agency of Transportation, pp. 4-7)

6.8 Customer Service Levels and Performance Measures for Maine

The preceding section of this report describes the rigorous process used by Vermont to select not only the performance measures to be used, but also the benchmarks to evaluate the seven service categories. However while Vermont has a notable performance measurement program they have not established customer service level measures. Customer Service Level (CSL) measures identify service standards at the “macro” level for each category of public transportation service. Performance Measures provide the “micro” view that can be used to improve effectiveness of a service provider in meeting the desired CSL. The purposes of performance measures are to quantifiably assess the efficiency and effectiveness of the transit system. For example, passenger trips per mile, number of passenger trips per hour, and operating expenses per mile. Regarding performance measures Maine’s peer state of Vermont used three performance “grades:” Successful, Acceptable, and Unacceptable. This section proposes customer service levels and performance measures for MaineDOT.

CSL ratings of Excellent, Good, Fair, Poor, or Unacceptable can be developed for each measure and each category of service regarding the safety, condition, and serviceability. Among the peer states, only Montana had a defined service standard or CSL: transit systems are expected to provide service to the general public a minimum of 40 hours per week.

When explaining Customer Service Levels and Asset Management for highways and how it applies to other modes MaineDOT Commissioner Bernhardt writes:

“MaineDOT expects to undertake a similar effort for all modes of transportation by developing asset priorities and CSLs for other hard assets such as airports, rail, and passenger transportation. Someday, direct comparison of CSLs across all modes will allow us to manage transportation assets in a more holistic way.”

(Maine Trails, June/July 2011, p. 55)

CSLs can be established for the five types of service: Urban, Small Urban, Rural, Intercity Bus, and Seasonal (or Tourism). These five categories of service parallel the manner in which Priority Roadway Corridors are described for highways, in which priorities and timeline goals are set to reach level C (Fair).

For public transportation, CSL measures for safety and condition can apply universally to all types of service. System Serviceability CSL measures should be tailored to each type of service. CSL data can be collected from every public transportation provider in the state on a periodic basis but should be assessed at least on a quarterly basis to note trends and areas of concern. In this way the performance measures and CSL measures are part of a risk assessment approach for managing sub-grantees. Data can be aggregated by service category, and appropriate CSL and performance measures aggregated on a statewide basis for comparisons.

Proposed performance measures are listed below: (Each measure can be rated as Successful, Acceptable or Unacceptable after measures are identified for each type of service.)

- a. Total unlinked passenger trips / Total service area population
- b. Total vehicle revenue hours / Total service area population
- c. General Administration expense / unlinked passenger trip
- d. Operating expense / unlinked passenger trip
- e. Total General Administration and Operating expenses / unlinked passenger trip
- f. Total General Administration and Operating expenses / vehicle revenue miles
- g. General Administration expense / vehicle revenue hours
- h. Operating expense / vehicle revenue hours
- i. Total General Administration and Operating expenses / vehicle revenue hours
- j. Total all revenues / Total General Administration and Operating expenses
- k. Total of farebox revenue / Total General Administration and Operating expenses
- l. Unlinked passenger trips / vehicle revenue miles
- m. Unlinked passenger trips/ vehicle revenue hours
- n. Unlinked passenger trips / Vehicles available for annual maximum service

- o. Vehicle revenue miles / Vehicles available for annual maximum service
- p. Vehicle revenue hours / Vehicles available for annual maximum service
- q. Unlinked passenger trips / Theoretical demand for trips (for the service area as presented in this document)
- r. Fatalities per 100,000 vehicle revenue miles
- s. Injuries per 100,000 vehicle revenue miles
- t. Complaints per 1,000 unlinked passenger trips
- u. Compliments per 1,000 unlinked passenger trips

Proposed Customer Service Measures are listed below: (Each measure can be rated as Excellent, Good, Fair, Poor, or Unacceptable after measures are defined for each type of service.)

- a. Bus Safety:
 - i. Fatalities per 100,000 vehicle revenue miles
 - ii. Injuries per 100,000 vehicle revenue miles
- b. Bus Condition:
 - i. Age or Mileage of Vehicle as function of FTA service life standards
 - ii. Fully Accessible Vehicles/total fleet
 - iii. Number of breakdowns/towed (missed service)/100,000 service miles
 - iv. Preventative maintenance inspections within 20% of scheduled mileage.
- c. Facility Conditions
 - i. Age of facility.
- d. System Serviceability
 - i. Ridership per capita/year
 - ii. Days of service/week
 - iii. Percent of area accessible by transit system
 - iv. Connections between modes

6.9 Coordination of Public Transportation Services

49 U.S.C. Section 5311(FTA formula grants for rural areas) requires that a state "...program provides the maximum feasible coordination of public transportation service assisted under this section with transportation service assisted by other Federal sources." (FindLaw Web site) Other FTA grant programs require similar coordination of effort, such as the Locally Coordinated Plan under 49 USC 5310 concerning programs that serve older adults and people with disabilities. As part of the federal mandate, MaineDOT is required to continue to coordinate transportation services with recipients of other federal, state, and locally funded programs.

For over 30 years Maine has helped coordinate transportation services among state agencies. In 2004, Maine was cited as a model of transportation coordination among state transportation, human service, and labor agencies. (Transystems. TCRP Report 105: *Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged*) TCRP Report 105 also highlighted Maine's coordination that occurs at the regional level, including the value of sharing coordination practices with other regions throughout the state. Coordination of transportation services was well in place prior to it being formalized by law in 2009 with the creation of the Governor's Interagency Transportation Coordination Committee (ITCC).

The ITCC 2013 Annual report recognized the requirement to coordinate transportation planning but also notes that they must be cognizant of how each department focuses its priorities due to funding challenges that affect each agency. Similarly, they must review regulatory issues and barriers, among other real-world impacts, that must be considered in coordinated transportation planning not only with each other, but also within their own agencies. (Maine Department of Transportation, Maine Department of Health and Human Services, and Maine Department of Labor)

Recent decisions, by the state's Department of Health and Human Services (DHHS) made in response to federal concerns about separating the functions of trip provider from trip broker for non-emergency medical transportation services have caused a reexamination of the level of public transportation resources invested in social service programs. MaineDOT's primary focus is on transportation for the general public and hence coordination with non-emergency medical transportation services has become more difficult with the implemented brokerage system.

State Public Transportation Advisory Boards: Half of Maine's peer states have a general public transportation advisory board, although the focus of one is on capital expenditures. Maine as of this writing does not have a general public transportation advisory board or committee. However, Maine does have an Interagency Transportation Coordinating Committee (ITCC) which in the past focused only on coordination of passenger transportation with emphasis on human service type transportation.

Membership in the ITCC was increased to include representatives of each of the metropolitan planning organizations; private bus operators; a statewide non-profit on behalf of the elderly; a medical provider; a business that relies on public transportation; a statewide association of planning and development; an organization representing people with disabilities; a non-profit transportation provider; an economic development organization; and an organization representing low income persons. In addition members of the joint standing committee of the Legislature having jurisdiction over transportation and at least one representative of a rail transit group were invited to participate.

By including the above agencies and a broader range of stakeholders Maine has broadened the purpose of its statutory committee that focuses on social service transportation issues to include matters concerning general public transportation.

6.10 Sources of State Funds in Seven Peer States

The study team further investigated the sources of peer state funds by reviewing State Management Plans, state legislation, and telephone interviews with state transit unit officials. *Appendix G: Purpose and Eligible Uses of State Funds, Amount, Source, and Distribution Method in Peer States* presents the results of that research. The following list presents a summary of data concerning sources of state funds for public transportation for Maine's peer states results in one overarching conclusion: There is no new source of state funds that isn't already known.

- **General fund**
 - Unrestricted state highway funds (excludes gas tax)
- **Fuel taxes**
 - Off-road vehicle fuel tax
 - State gas tax
 - State diesel tax
- **Motor vehicle/Rental car sales tax**
 - Rental vehicle taxes.
 - Vehicle purchase and use tax
- **Registration/license/title fees**
 - Vehicle title fees
 - Vehicle registration fees
 - Vehicle license fees
- **Funds for capital expenditures**
 - State bond funds
 - Mineral royalty payments (for Transportation Enterprise Account- loans for capital investments)

A review of Maine's peer states did not reveal a new potential source of state funds for public transportation.

6.11 Funding Public Transit in Maine and Alternatives

Public transportation within the Maine Department of Transportation is in a “Catch-22” regarding sources of state revenue. Public transportation does not receive any funding from the General Fund because it is a function within MaineDOT. MaineDOT is funded through the Highway Fund. Public transportation is constitutionally and legislatively prohibited from using monies collected in the Highway Fund. Public Transit is funded through the Multimodal Transportation Fund. The Multimodal Transportation Fund could receive more revenue from either new sources or from those that are currently going into the General Fund. The additional revenue that goes into the Multimodal Transportation Fund could be designated for specific modes and notably public transportation.

The remainder of this section summarizes alternative sources of funding for public transportation and alternative sources of revenue.

General Fund. Nationwide, 37% of states receive funding from the state’s General Fund, including four of Maine’s seven peer states. MaineDOT, including general public transportation, does not currently receive funding from this source. However in the statewide telephone survey concerning public transportation, 58% of Mainers favored an increase in the state’s operating budget or General Fund for local bus service.

Many of the revenue sources that contribute to Maine’s General Fund are sources for public transportation in other states. These sources include individual income taxes, corporate fees and income taxes, sales and use taxes, cigarette taxes, racino or casino revenue, and lottery revenue.

In Maine, Other Special Revenue Funds (OSRF) are collected and split among recipients based on the specific legislation of the OSRF. Maine’s General Fund shares a relatively small portion of funds collected in OSRF’s primarily dedicated to the Highway Fund. These include the gasoline tax, motor vehicle registration and license fees, and operator license fees. Again, other states use these sources of funds for public transportation but the Maine State Constitution and legislation does not allow the use of these funds for purpose other than highways and bridges and state enforcement of traffic laws.

The Multimodal Transportation Fund is an OSRF program *within MaineDOT*. It is the only source of state funds for public transit in Maine. The purpose of the Multimodal Transportation Fund is to purchase, operate, maintain, improve, repair, construct, and manage multimodal forms of transportation, including, but not limited to, transit, aeronautics, marine and rail. The Multimodal Transportation Fund receives funds from a portion of the sales and use tax on rental vehicles, the Railroad Company Tax, and the Aeronautical Fuel Tax, and may accept other sources. (Source: 23 MSRA 4210-B) There is not a defined distribution of accrued funds by mode of transportation.

Fuel Taxes (Gas Tax, Diesel Tax, Off-road vehicle fuel tax, etc.) Nationwide, 50% of states use a share of fuel taxes as a source of funds for public transportation, including two of Maine’s peer states. As documented above, these are already a MaineDOT source of funds and are precluded from public transit use.

Technically, the Constitution limitation is placed on revenue collected from vehicles, operators, and fuels that are operated on public highways. However, Highway Fund legislation further limits the fuel tax imposed on internal combustion engine fuel, regardless of whether or not it is used on highways. This includes the Gasoline Tax and Special Fuel and Road Use Taxes. By law the Aeronautical Fuel Tax accrues to the Multimodal Transportation Fund.

In 2003, a resolution to amend the Maine Constitution was proposed to allow gas taxes and other highway fund revenue to be used for such transportation expenses as the Legislature considered appropriate. Language was included to allow the cost of administration, construction, equipment purchase and other expenses for mass transit as well as trails and routes for human-powered transportation. It was considered by the Joint Standing Committee on Transportation in February 2003 and voted ought not to pass; it was declared “dead” in accordance with legislative rules. (State of Maine 121st Legislature, First Session. LD 108 HP 117)

Vehicle Registration and Licensing Fees (Vehicle registration, title, and licensing fees). Nationwide, 17 states use vehicle registration or licensing fees as source of funds for public transportation, including one of Maine’s peer states. In Maine, all fees collected from motor vehicle registrations go to the Highway Fund, except for portions of fees for specialty license plates. \$10 of each fee assessed for regular motor vehicle registration, vanity plates and title applications go to the Transcap Trust Fund. (Compendium, 2014, p.54)

The Transcap Trust Fund is established as part of the Maine Municipal Bond Bank to provide transportation capital investment for MaineDOT and municipalities. The purpose of the fund is to provide financial assistance for the planning, design, acquisition, reconstruction and rehabilitation of transportation capital improvements of all modes that will forward the goals. Grants and loans may be used only for capital projects that have an anticipated useful life of at least 10 years, and a useful life of at least as long as the bond term. (Source: 30-A MSRA 6006-G) The Constitutional restriction also applies to the use of this fund.

Again, the Constitution limitation is placed on revenue collected from operators on public highways. Highway Fund legislation limits revenue received from the registration of motor vehicles to the purpose of the Highway Fund which excludes public transit. The costs to administer vehicle registrations is a permissible expense.

It is important to note that the Multimodal Transportation Fund is the only source of state revenue for public transit. The funds collected in this Other Special Revenue Fund are distributed among transit, air, marine and rail transportation providers.

Public transportation within the Maine Department of Transportation is in a difficult position regarding sources of state revenue. Public transportation does not receive any funding from the General Fund because it is a function within MaineDOT. MaineDOT is funded through the Highway Fund. Public transportation is constitutionally and legislatively prohibited from using monies collected in the Highway Fund.

Motor vehicle / Rental Car Sales Tax (Vehicle purchase and use taxes). Nationwide, 13 of 46 states use this category as a source of funds for public transportation, including two of Maine's peer states. Sales and use tax on motor vehicles, including camper trailers, boats, aircraft, and other casual vehicles accrue under Sales and Use Taxes and primarily go into the General Fund. (5.5% until 6/30/2015 when it reverts to 5.0%). (Compendium, 2014, p. 8)

Motor vehicle sales and use taxes are a General Fund source of revenue that could be considered to fund public transit through the Multimodal Transportation Fund.

Sales tax for the short-term use of rental automobiles is already used to partially fund the Multimodal Transportation Fund. This is currently set in law as 100% of sales tax revenue from truck or van rentals, and sales tax revenue from rental cars used during the last six months of the prior fiscal year. Sales tax revenue from the first six months of the fiscal year goes into the General Fund. The sales tax rate on rental automobiles is 10%. (Compendium, 2014, p. 8)

In the telephone survey, **almost half of Mainers favored an increase in rental car sales tax as a source of funds for local bus service.** . The rental car sales tax could be increased above 10% and/or the sales tax from rental cars from the first half of the fiscal year that currently goes to the General Fund could be considered as additional funds for the Multimodal Transportation Fund.

General Sales Tax. A general sales tax is one of the lesser used methods of funding public transportation. 8 of the 46 states reported it as a source, and none of Maine's peer states use it. However, in 2013, Virginia raised general sales tax by 0.3% and dedicated 1.25% of the increase to transit and passenger rail. (Source Transportation for America, web)

In the telephone survey, only 21% supported an increase in sales tax to fund local bus service. It was the least preferred alternative. In Maine, Sales and Use Taxes almost exclusively go into the General Fund. In FY13 almost 1/3 of the General Fund revenue came from Sales and Use Taxes. A relatively small percentage of current Sales and Use Tax, (related to long term rental vehicles), in addition to the amount provided by short term rental vehicles, could be designated for use as operating funds by public transportation in the Multimodal Transportation Fund.

Operator License Fees. All fees collected for operator licenses accrue to the Highway Fund. (Source: Compendium, 2014, p. 54). The Constitutional and legislative directive on the use of the Highway Fund are the similar to those regarding vehicle registrations identified above.

Bridge or Turnpike Tolls. New Jersey, one of the states that operate transit systems, and Pennsylvania reported using bridge and turnpike tolls as a source of funds for public transportation. The Maine Turnpike Authority (MTA) is an independent state agency separate from MaineDOT, established by the legislature to operate, maintain, and rebuild the turnpike. Use of turnpike revenues are defined in statute. (Maine Revised Statutes Annotated, Title 23 Section 1974) The legislation does not preclude MTA from participating in cooperative projects and sharing in the costs with MaineDOT when the project can be linked directly to Maine Turnpike infrastructure such as removing single occupancy vehicles from the turnpike to slow its deterioration. (Maine State Legislature, March 2015)

The MTA (and MaineDOT) contributes to the operation of the ZOOM Turnpike Express, a commuter bus service from Biddeford and Saco to downtown Portland to reduce the number of single occupancy vehicles on the turnpike between those communities (Maine Turnpike Authority, website).

In 2011, legislation was proposed for MaineDOT to receive at least 3% MTA operating revenue each year. The proposed legislation also directed MTA to add ZOOM commuter bus service between Portland and Lewiston and Auburn, between Portland and Augusta, and between Portland and points in York County. It was considered by the Joint Standing Committee on Transportation in March 2011 and voted by the committee as ought not to pass; it was subsequently declared “dead” in accordance with legislative rules. (State of Maine 125th Legislature, First Session. LD 673 HP 503)

Lottery. Oregon and Pennsylvania reported using lottery proceeds for public transportation purpose. In both states the lottery revenue was dedicated to a specific purpose. In Oregon it was pass-through bond payments for designated rail and street car projects. In Pennsylvania, the lottery was directed to several programs to support the elderly population age 65 and older. In addition to rent rebates, prescription drugs, care giver support and long-term care, two programs were directed to transit. One provides free travel on local bus routes and rapid-transit. The second provides specialized transportation services at a discounted rate wherein a rider or sponsor pays only 15% of the standard shared ride fare.

The Maine State Lottery, including revenue it receives from the Powerball Multistate Lottery, and the Tri-State Lotto Compact with Vermont and New Hampshire are revenue sources. Net lottery proceeds after statutory distribution of cash prizes, administration, and other payments are currently credited to the General Fund. In 2013 the General Fund received \$52.9 million in lottery revenue. (Source: Compendium, 2014, p. 64).

In the telephone survey, 71% of Mainers favored a lottery as a source of funds for local bus service. It was the most preferred alternative by a wide margin. Lottery revenue has potential as a source of funds for public transportation, especially if it can be tied directly to a specific benefit such as funding transportation options for elderly and disabled persons in rural areas.

Casino Fees. Iowa reported using a fixed amount of the proceeds from casino taxes for competitively selected capital infrastructure projects. New Jersey Transit has reported that its elderly and disabled program was funded by a casino revenue fund.

In Maine, racino and casino revenue are collected from slot machines and table games. The two facilities that currently operate these ventures are taxed in a variety of ways depending upon the type of gaming activities they provide. They also pay application, registration, and licensing fees. In FY13, \$51.9 million total state revenue from racinos and casinos was collected; \$15.4 million went to the General Fund and \$37.5 million to Other Special Revenue Funds.

The revenue from taxes are distributed based on the type of facility to the General Fund and a long list of diverse recipients. The amount each of the Other Special Revenue Funds receives is based on a percentage of net revenues from slot machines or gaming tables, depending upon the facility. For example, both facilities pay a percentage, albeit a different one, from their net slot machine revenue to the Agricultural Fair Support Fund. The Department of Education receives 25% of net slot machine and 10% of net gaming table revenue from one of the facilities, and no share from the other one. (Compendium, 2014, pp. 62 – 64).

None of the revenue from casinos or racinos is currently going to MaineDOT or directly to public transportation and could be considered as a potential source of revenue. However, the current method of distributing the revenues generated by racinos and casinos was the result of a painstakingly complex negotiation process, and it may be impractical to do so.

Municipal assessments (Local assessments, congestion relief, mobility taxes). Massachusetts, New York, and Virginia reported collecting revenue from municipalities for public transportation. In Massachusetts the state is the operator of the MBTA and the municipalities contribute to its operation. In New York, one of the purposes of the assessment is for counties to contribute to the regional transportation system since many of their residents are commuters. A congestion relief fee is collected from specific localities in Northern Virginia. In all three of these states, municipal assessments are linked to a designated share of services rendered.

In Maine, most of this revenue results from payments by county governments to the General Fund. In Other Special Revenue Funds, The Department of Public Safety collects revenue for contractual services provided by the State Police and MaineDOT collects revenue from municipalities for the municipal share of projects. (Compendium, 2014, p. 71).

Unless MaineDOT were to be the direct provider of service in a municipality or county, a municipal assessment would not be a source of state revenue to fund public transportation.

Municipalities and counties could be considered as direct beneficiaries when general public transportation services are available to their residents. Those municipalities or counties that are not already contributing to the local share could be a source of revenues and then pay an assessment. The assessment could factor in the level of potential beneficiaries of the service, calculated in a manner similar to the one that MaineDOT uses in allocating nonurban state and federal funds to regional transportation providers. Currently there is no mechanism in place to make such assessment.

Corporate Fees or Taxes (Franchise fees or Corporate Income Tax). Arkansas and Maryland reported using corporate franchise fees and corporate income taxes, respectively, as sources of funds. In Arkansas, corporate franchise fees are placed in the General Fund. In Maryland, a state operator of public transportation, a Transportation Trust Fund receives a percentage of corporate income tax which amounts to approximately one-fifth of revenue generated by the tax.

In Maine, all corporate income tax goes into the General Fund. With some exceptions regarding financial institutions and insurance companies, corporate income tax is collected from all except Subchapter S corporations subject to federal income tax. It applies to corporations with a tie to Maine, with a progressive rate tied to the proportional amount of business the corporation does in the state and how much taxable income is generated by the corporation. (Compendium, 2014, p.5)

Corporate income taxes could be a potential source of state revenue for public transportation through the Multimodal Transportation Fund, in particular those with a direct linkage to transportation services such as corporations that provide non-emergency medical transportation services.

Personal Fees or Taxes (Cigarette tax, documentary tax stamps or recordation tax). This category consolidates miscellaneous taxes or fees that are essentially paid by an individual and passed through to the state. In Oregon, a percentage of state cigarette taxes were dedicated to a Special Transportation Fund dedicated to people who are elderly or disabled. Florida used a documentary tax stamp to provide ½ of the non-federal share for federal “New Starts” programs. New York reported using a mortgage recording tax and Virginia used a recordation tax to record deeds, deeds of trust, and other documents related to real estate.

In Maine there is a cigarette tax and tobacco products tax, both of which go into the General Fund. In FY13 the cigarette tax collected \$127.4 million in revenue, and the tobacco products collected \$10.5 million. The tax rates are established by law. The tax rate on cigarettes is currently 100 mills

per cigarette (\$2.00 per pack) and was last changed in 2005 from 50 mills per cigarette. (Compendium, 2014, pp. 11-13)

A 20¢ increase in the cigarette tax per pack in 2013 (i.e. raising the mill rate from 100 mills to 110 mills) would have resulted in an additional \$12.7 million.

Cigarette taxes could be a potential source of revenue for public transportation through the Multimodal Transportation Fund because of the linkage to health benefits, although the practicality implementing such an increase is questionable unless the revenue could be dedicated to a specific population of residents such as people who are elderly or disabled.

Use of flex funds from Federal Highway Administration (FHWA) and alternate use of §5311 state administrative funds. The preceding sections focused on state funds, other than MaineDOT, as potential sources of funding. It is also important to identify other federal sources. In Maine, the Portland MPO already flexes a percentage of its FHWA funding to FTA programs. Vermont is unique among the peer states in that it uses FHWA “flex funds” for their state transit unit administrative costs and eligible §5311 capital projects. Vermont further chooses to distribute the 15% percent of the state’s total fiscal year §5311 apportionment which could be used for state administrative costs, to the sub-recipients for operating purposes. To use “flex funds” in such a manner in Maine would require a reassessment of all priorities of the Maine Department of Transportation to determine what portion if any could be reallocated.

Key Points about Alternative Funding. States have chosen a range of eligible programs to fund public transit. There is no “one best way.” Individual state-to-state differences and political conditions are the principal determinants in deciding where state funds were allocated. Key points when reviewing the findings concerning alternative sources of state funds for public transportation as they apply to Maine are:

- The Maine State Constitution prohibits public transportation from the use of all revenue from the registration, operation, and use of vehicles on public highways, and the use of fuel taxes from these vehicles.
- Legislation effectively prohibits the use by public transportation of funds generated for the General Highway Fund (Gas tax, Special Fuel and Road Use Tax, registration of motor vehicles, licensing of operators, etc.).
- The Multimodal Transportation Fund is the only source of state revenue for public transit. The funds collected in this account are distributed among transit, air, marine and rail transportation providers.

6.12 Summary of Chapter 6

The Strategic Plan 2025 is based on research focused upon ideas and practices not only in Maine, but also in other states. A review of existing performance measures and standards are identified and compared among the peer states. Important points in this chapter are:

- MaineDOT uses benchmarking on performance measures related to roadways with Idaho, New Hampshire, North Dakota, and Vermont. Three other peer states were added for this plan: Montana, West Virginia and Wyoming. The group of seven peer states is used in the study for examining service standards and performance measures
- The productivity and performance of Maine transit systems is below peer group averages and national averages on the performance measures presented in this plan.
- Vermont is particularly progressive and a leader among the peer group states in use of performance measures and the use of FHWA “flex funds.”
- Performance Measures provide the “micro” view that can be used to improve effectiveness of a service provider in meeting the desired Customer Service Levels (CSLs). Customer Service Levels identify service standards at the “macro” level for each category of public transportation service.
- A review of Maine’s peer states did not reveal a new potential source of state funds for public transportation.
- Funding sources allowed by law for public transit in Maine are problematic and no single solution comes to the fore. Lottery revenue has potential as a source of funds for public transportation, especially if it can be tied directly to a specific benefit such as funding transportation options for elderly and disabled persons in rural areas.

So far the plan has concentrated on research, surveys, inventories, and answering questions about existing conditions and costs. Using all that background as a foundation, the next chapter describes the goals for future public transportation in Maine. In the next chapter, goals are presented for the Maine Strategic Transit Plan. These goals are consistent with the basic directions other states are taking with respect to goals and objectives such as the use of specific performance measures concerning project delivery timelines, specific timeframes for policies to be implemented, and a very straightforward, clear implementation plan.

Section Two: Concept for Future Public Transportation in Maine

CHAPTER 7.

PUBLIC TRANSIT PROGRAM GOALS

For more information:

Task 12: Strategic Goals and Objectives

7.1 Introduction

Previous sections of this report have inventoried and presented information related to the question “*Where are we?*” Given the existing conditions described in previous chapters and the information presented concerning relative performance concerning meeting 20% of the theoretical demand, it is appropriate to now answer the question “*Where do we want to go?*” This section of the report, chapters 7 and 8, presents an answer that question in the form of goals and recommendations concerning specifically where we want to go to enhance and improve public transit in Maine.

In August 2012 MaineDOT published *Strategic Plan 2012*. It provides the department’s mission, vision, core values, and goals. MaineDOT’s stated mission is: “To responsibly provide our customers with the safest and most reliable transportation system possible given available resources.”

The specific objectives, strategies, and recommendations regarding public transportation developed during the *Maine Strategic Transit Plan 2025* process align with and complement *Strategic Plan 2012* goals. The goals of the department which are the adopted goals of this report are:

1. **Manage the Existing System.** Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.
2. **Support Economic Opportunity.** Wisely invest available resources to support economic opportunity for our customers.
3. **Build Trust.** Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

This section identifies common themes and broad ideas that have emerged as a guide and starting point to identify specific public transportation program goals that are derived from the above three department goals.

A synthesis of long-range transportation plans from all 50 states and the District of Columbia was reviewed to better understand the types of plans and the factors used in transportation planning, and to discover related public transportation goals and objectives. The synthesis was completed

immediately prior to enactment in July 2012 of the Federal surface transportation program authorizing legislation “Moving Ahead for Progress in the 21st Century” (MAP-21) and covered all forms of transportation, not just transit. Like other attempts to consolidate and analyze information, the synthesis’ authors noted the wide difference in construction, style, and content of the 51 long-range plans, as well as the completion dates of the most recent plan (ranging from 1994 to 2010). The wide diversity also applied to inconsistent terminology used in the plans e.g., principles, goals, objectives, policies, strategies, etc. (John A. Volpe National Transportation Systems Center, 2012, pp. iv - 4)

While MAP-21 may affect how states implement their long-range plans, the broad topics, observations and insights from the synthesis, in particular those that might be described as “core” and related to transit, are nevertheless useful for purposes of corroborating the goals and objectives of public transportation offered here. For example, California measures performance of six goals across all modes of transportation, including transit, that: improve mobility and accessibility; preserve the transportation system; support the economy; enhance public safety and security; reflect community values; and enhance the environment. (Volpe, p 31) Nevada has a guiding principle regarding customer service which focuses on improving external customer satisfaction to have a positive impact on the traveling public. (Volpe, p. 22) Wisconsin notes the challenges introduced by an aging population and the need to meet the mobility requirements of this growing population, and has specific objectives regarding the state’s contribution to the operating costs of large and small urban transit systems to meet the need. (Volpe, p. 24) Performance measures are included in over half of the plans to evaluate progress in achieving the goals and objectives. Some states are also using the measures to evaluate, prioritize, and select proposed projects based on specific criteria related to transportation goals. (Volpe, pp 29- 33)

In summary, the Maine Strategic Transit Plan is consistent with the fundamental approach other states are taking with respect to goals and objectives such as the use of very specific performance measures concerning project delivery timelines, specific timeframes for policies to be implemented, and a straightforward implementation plan which is the largest part of MaineDOT’s *Strategic Plan 2012*.

The February 2014 *State Management Plan* (SMP) for transit is consistent with the mission of MaineDOT. The primary objective of the SMP is to “provide customers with the safest and most reliable transportation system possible through the improvement of the mobility for all Maine citizens including seniors, persons with disabilities and low income persons in the rural, small urban, and urbanized areas of the State of Maine. This includes support for continuation of existing services; the inauguration of new services where need is demonstrated; and support for and improvements to existing intercity or long distance common carrier services throughout the State. Integral to this objective is the coordination of new and existing services to those recipients of other

federal, state, and locally funded programs.” (State of Maine Public Transportation Programs State Management Plan 2)

With a foundation in core values and core beliefs from recent research within the state of Maine, reinforced by research from other states and national trends in relevant long-range plans, the following discussion amplifies the department’s three goals and presents recommendations specific to public transit that are derived from the department’s three goals:

7.2 Goals

The following discussion describes the goals of MaineDOT and describes the relationship to public transit with a synopsis of each goal. None of the goals is uniquely independent. The goals of Strategic Transit Plan 2025 provide the foundation for transit and can be transformed into the language of *Strategic Plan 2012*. The recommendations of this plan will be blended into MaineDOT’s *Strategic Plan 2012* as one of the “family of plans.” The recommendations suggested in this section can be closely tied to measureable outcomes concerning levels of service, service standards, and asset management. The goals recommended for Strategic Transit Plan 2025 are:

Goal 1: Manage the Existing System. Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.

For public transit this means supporting public transportation services that are consumer oriented and based on the need for service. Consideration should be given to the effective routing, scheduling and operating procedures. Managing the existing system means not only must scarce existing transportation resources be coordinated to provide appropriate service to the consumer, but effort should be taken to affect and coordinate other issues which impact transit usage, such as social service programs, medical service needs, employment schedules, and others.

To achieve this it is necessary to use appropriate performance measures and standards to evaluate a public transit project’s ability to meet transit need when deciding to:

- A. Preserve the existing public transportation system.
- B. Enhance an existing system.
- C. Inaugurate new services where there is demonstrated need.
- D. Reduce or eliminate services with low need.

Goal 2: Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.

Public transportation can strengthen economic development objectives and opportunities for both infrastructure investments, land use and business and other services. Public transportation provides benefits not only to people who use it, but also the area it serves such as through seasonal transit for visitors and reduction of congestion and its associated beneficial environmental impacts. It creates and supports jobs, including access to them. It provides benefits to businesses near public transportation for their employees and customers. (American Public Transportation Association, 2012, pp. 1-3). But supporting economic opportunity means more than just creating jobs it includes supporting entrepreneurship and competition so that all customers, both riders and transit providers have choices. To achieve the goal of economic support MaineDOT can:

- A. Promote a variety of services to meet service standards recommendation.
- B. Support an efficient, cost effective mix of public, quasi-public, private, and volunteer services and resources which provides sufficient funds to meet acceptable demand levels.
- C. Apply a wide range of federal, state, and local funds to public transportation and stimulate the use of private funds, facilities, and equipment to reduce reliance on public subsidies.
- D. Use the lowest cost alternative where two services equally meet public needs.
- E. Encourage Volunteerism.

Goal 3: Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

While building trust revolves around transparency, public information strategies and sharing relevant information with the public and others, a key element is promoting and supporting increased public transit for those with a need. Inspiring trust is done by demonstrating administrative competence and interacting with those who have a need for or manage public transit services. Trust is also enhanced by demonstrating empathy and understanding of transit issues as real and part of the fabric of public services that are necessary to meet the needs of Maine residents.

By promoting and advocating for public transit MaineDOT demonstrates empathy and that the need is real and recognizes the important role it plays in people's lives. The general public, especially in remote areas and rural areas, may be unaware of the public transit options available and the department can help educate the public about existing and proposed services. Public transportation services can be considered as part of the range of enhancements possible when considering highway and the mobility needs of a given area. To achieve the goal of building trust the following activities can be implemented:

- A. Develop effective two way communication between the customers and the department with emphasis on a public transportation advisory committee made up of transit users, providers of transit, elected officials and other stakeholders.
- B. Publicize and share performance measures for public transit
- C. Provide technical assistance to providers to improve efficiency and effectiveness focusing on safety and security as well as customer services.
- D. Maintain an active web portal showing available services and their performance measures
- E. Develop an annual action plan that outlines and schedules timeframes for activities related to building trust and increasing the competence of transit staff in the department and staff in the projects funded by the department.

7.3 Summary of Chapter 7

This chapter identifies common themes and ideas that have emerged as a guide and starting point to identify activities to guide the MaineDOT transit unit. Important points about goals to be considered are:

- The goals suggested can be tied to measureable outcomes concerning levels of service, service standards, and asset management.
- The list of goals recommended for Strategic Transit Plan 2025 are:
 - Manage the Existing System. Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.
 - Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.
 - Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

The implications of these goals are broad and range from practical day to day funding issues to more difficult trust building over time with the both the transit riding and non-riding residents of Maine.

CHAPTER 8.

RECOMMENDATIONS FOR IMPROVING PUBLIC TRANSIT IN MAINE

8.1 Overarching Conceptual Framework of the Strategic Plan

This concluding chapter sets out a framework for MaineDOT's continued support of public transportation systems in Maine through 2025. It is based on inventories, analyses and surveys undertaken as part of the work on the Maine Strategic Transit Plan 2025, as well as policy considerations and the desired outcomes from the goals of MaineDOT. The goals, which are described in Chapter 7 are directed strongly at making the best use of public transit dollars administered by MaineDOT.

The goals for Strategic Transit Plan 2025 and which answer the question, *Where do we want to go?*, are listed below:

- **Goal 1: Manage the Existing System. Effectively manage Maine's existing transportation system for safety and effectiveness within reliable funding levels.**
- **Goal 2: Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.**
- **Goal 3: Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.**

The Overarching Conceptual Framework for this strategic plan is: *Where are we? Where do we want to go? And finally, How do we get from where we are to where we want to go?* Previous chapters of this report have described where the Maine transit services stand with regard to demographics of Maine's population, services provided and percent of demand being met. Current population, population projections, various surveys, and comparisons with peer states were examined as well identifying the current investment in public transportation. Notably Maine has a high need for transit services due to having the highest median age in the country, its rapidly aging population, and slow population growth among non-elderly residents. As revealed in the telephone survey of Maine residents, there is a high level of support for public transit and the belief that transit is good for business and for making Maine a better place to live.

In the previous chapter, goals were set out which emphasize the important role of public transit for growth and development. In this chapter, the question of *where we want to go* is addressed along with information on the questions of *where we are and how we get to where we want to go*.

This chapter also answers the central questions that this research effort was directed to address:

- What will it cost to continue existing public transit services?
- What will it cost to expand services and meet a minimal level of service to those in need? (Minimal level of service is defined as 20% of theoretical need)
- What should the focus of MaineDOT's public transit effort be?
- What policies or procedures need to be changed or implemented to get where we want to go?

8.2 What Will It Cost To Continue Existing Public Transit Services?

As described in previous chapters Maine has a varied set of public transit providers and service types spread over the state. Service levels in some areas of the state are exceeding the minimal (20% of theoretical demand) but service levels in most of the state are not meeting this minimal level. The percentage of needs being met in rural areas ranges from a high of 30% for Sanford Transit in York County to a low of 7% for Knox County. In urban areas the range is 31% for South Portland Bus Service to 11% for City Link (Table 11). It must be noted that the aforementioned percentages are averages and there are significant portions of service areas that meet 0% of the theoretical demand.

Assuming an annual inflation rate of 1.5%, if all the intercity, fixed route, flex route and seasonal flex route services are continued at their existing level of service an additional amount of \$3.0 million will be needed over the ten year period for administration and operations. In the first year \$280,000 will be needed for administration and operations. In addition, \$95.5 million will be needed over the 10-year period (\$9.9 million the first year) for capital investments including replacement of existing buses.

8.3 What Happens If Maine Doesn't Increase Funding For Transit?

Albeit struggling with buses that are beyond their useful life and other limitations, Maine will continue to have some transit systems regardless of the available funding. A few of the systems will continue to meet the minimal 20% of need and some will not. However, given the aging equipment and increase in the populations of elderly and disabled persons, difficulties in providing services will multiply and gaps in services will become more prominent. Importantly, the following predictive descriptions of service make a significant presumption that Federal Transit Administration (FTA) funds will continue at their current levels (\$12.3 million per year) or greater. Without federal funds it is highly unlikely that the State of Maine or any local governmental body could make up for their absence. Without FTA funding all services will shrink and many will

disappear. With the assumption that FTA funds will continue the following predictions about the future are made.

The four largest systems, all fixed route systems in Maine's largest metropolitan areas (Metro in the Portland area, South Portland Bus, Citylink in Lewiston-Auburn and Community Connector in the Bangor area) will continue to offer public transportation, although one of the systems, Citylink, will continue to fall short of meeting estimated baseline needs.

The small urban systems (Bath CityBus, Brunswick Explorer, Kennebec Explorer in the Augusta and Waterville areas, and ShuttleBus in the Biddeford-Saco-Old Orchard Beach area) will also continue to provide services much as they have in the past, but will continue to fall short of meeting estimated baseline needs. Other, smaller flex route systems will continue as they have in the past but will also continue to fall short of meeting estimated baseline needs.

Rural transportation will not be available to the extent it existed prior to implementation of the brokerage system on August 1, 2013. Regional providers might continue to provide some general public rides, but, as a rule, will not have the resources to offer significant public transit services. Negative impacts on general public transportation in rural areas are predicted to include:

- Maintenance costs of vehicles will increase and impact the amount of service that can be delivered due to aging equipment and vehicles that must be retired with no funding for replacement;
- Evening and weekend service, rare now, will be virtually nonexistent;
- Public transportation to places of employment will be unavailable in most areas that are currently beyond service areas of existing fixed and flex route providers;
- Persons with disabilities and the rural elderly who no longer drive will be further isolated and at increased risk of not being able to live in their homes because of lack of transportation;
- Small communities without transit may become less connected to larger service center communities and thus be less attractive as a place to live and work;
- Federal Transit Administration funding sources will continue to dictate the extent of service that can be offered;
- Persons who depend on transit for life support (elderly persons, low income families and people with disabilities) may find no other recourse but to move to Maine's largest cities if they have mobility problems and need access to public transportation.

Regardless of the type of system, demand and need for public transportation will continue to grow throughout the state. If transit investments do not keep pace with that demand, the services will fall further and further behind in their ability to meet the demand, and the quality of life in Maine will deteriorate.

8.4 What Will It Cost to Meet a Minimal Level of Service, (Defined as 20% of Theoretical Demand)?

As described in *Transit Cooperative Research Program (TCRP) Report 161, Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation: Final Workbook*. (Washington D.C. 2013) it was determined by reviewing transit operations and administrative practices from across the United States that meeting 20% of the theoretical need for trips represents an observed and acceptable level of service for public transit. While this may seem like a small percentage of demand to meet, to advance the statewide percent of demand met from areas of 0% met to a high of 31% (for South Portland), the costs to meet the 20% average level can be formidable. To bring all existing public transportation services in Maine up to the minimal 20% level, in 2013 dollars, will cost \$7.4 million annually for ten years (using the cost performance of the best current costs of Maine transit providers) and \$14.0 million annually for ten years (using the average cost performance of Maine transit providers). The nearly double cost of increasing services between the best costs of existing services versus the average costs represents both a positive factor and a challenge. The positive factor is represented by the fact that there are some highly efficient and effective services in Maine and the challenge is how to transfer the techniques that these services are using to the less productive services.

Table 16: Cost to Meet 20% of Transit Demands Annually is a summary of what it would cost to meet the baseline goal of 20% of the transit need and what funds existing transit providers would need to meet the 20% minimal level of service. The table is based on data derived from the Cost Overview Technical Memorandum, Tasks 14 and 15. The first column in the table below is a listing of the type or categories of service. The second column is the estimated cost of meeting the 20% goal using the efficiencies of the least cost services in any given category of transit providers. The third column is the cost of meeting the 20% goal using the average cost in any given category of services.

Table 16: Cost to Meet 20% of Transit Demand Annually

Cost to Meet 20% of Transit Demand Annually Using Existing Service Providers at FY2013 Costs		
Type of Service	Lowest Cost	Average Cost
Fixed Route Services/Flex Route Urbanized	\$3,000,692	\$4,220,377
Flex Route Small Rural Cities	\$676,100	\$1,081,433
Flex Route Rural	\$836,255	\$897,352
Rural Counties	2,924,741	\$7,783,038
Total	\$7,437,788.00	\$13,982,200.00

8.5 Sources of Funds and Per Capita Fund Allocations

The previous sections of this chapter have dealt with costs. It is important to understand as has been discussed in previous chapters, where the funds come from and how Maine compares with other states in funding public transit. Also, what sources of state money might Mainers be willing to support as a source for increased funding for expanded public transit?

Maine is in the lowest quartile of states providing funding for public transit. The state's contribution to public transportation, except for substantial funding for the Maine State Ferry Service and Amtrak, is low. AASHTO (American Association of State Highway and Transportation Officials) reports that the average state spending on public transportation in FY2010 (the most recent data available for comparison by state) was \$46.86 per capita, with a median of \$6.68 per capita. In FY2010, Massachusetts was at \$183.22, and Connecticut at \$115.01. Vermont was at \$10.92 per capita. With a contribution of 40¢ per capita, Maine ranked between Mississippi at 54¢ and New Hampshire at 32¢ in FY2010. The following table shows the per capita allocations of funds for public transit from the peer states used in analysis throughout this study.

Table 17: Per Capita Allocations of Funds for Public Transit from the Peer States

Per Capita Allocations of Funds for Public Transit from the Peer States	
State	FY 2010 Per Capita Funding
Idaho	\$0.20
New Hampshire	\$0.37
Maine	\$0.40
Montana	\$0.46
West Virginia	\$1.55
Wyoming	\$ 4.56
North Dakota	\$4.82
Vermont	\$10.17
Weighted avg.	\$2.82
Unweighted avg.	\$1.88

When presented with a list of possible sources of funds for expanding public transportation, the statewide telephone survey conducted as part of the Maine Strategic Plan revealed that a lottery was the preferred source by Mainers. They also felt that users should pay some of the cost of service. No innovative sources of funds were discovered in the analysis of peer group and all the sources of funds identified as part of this study had unique difficulties in their application for transit in Maine. One of the tasks for MaineDOT to advance transit or maintain the status quo is to work with the Legislature, local municipalities, transit providers and others to discover sources of additional funding for public transit.

8.6 The Focus for MaineDOT: What Can Be Done Until New Funding Is Secured?

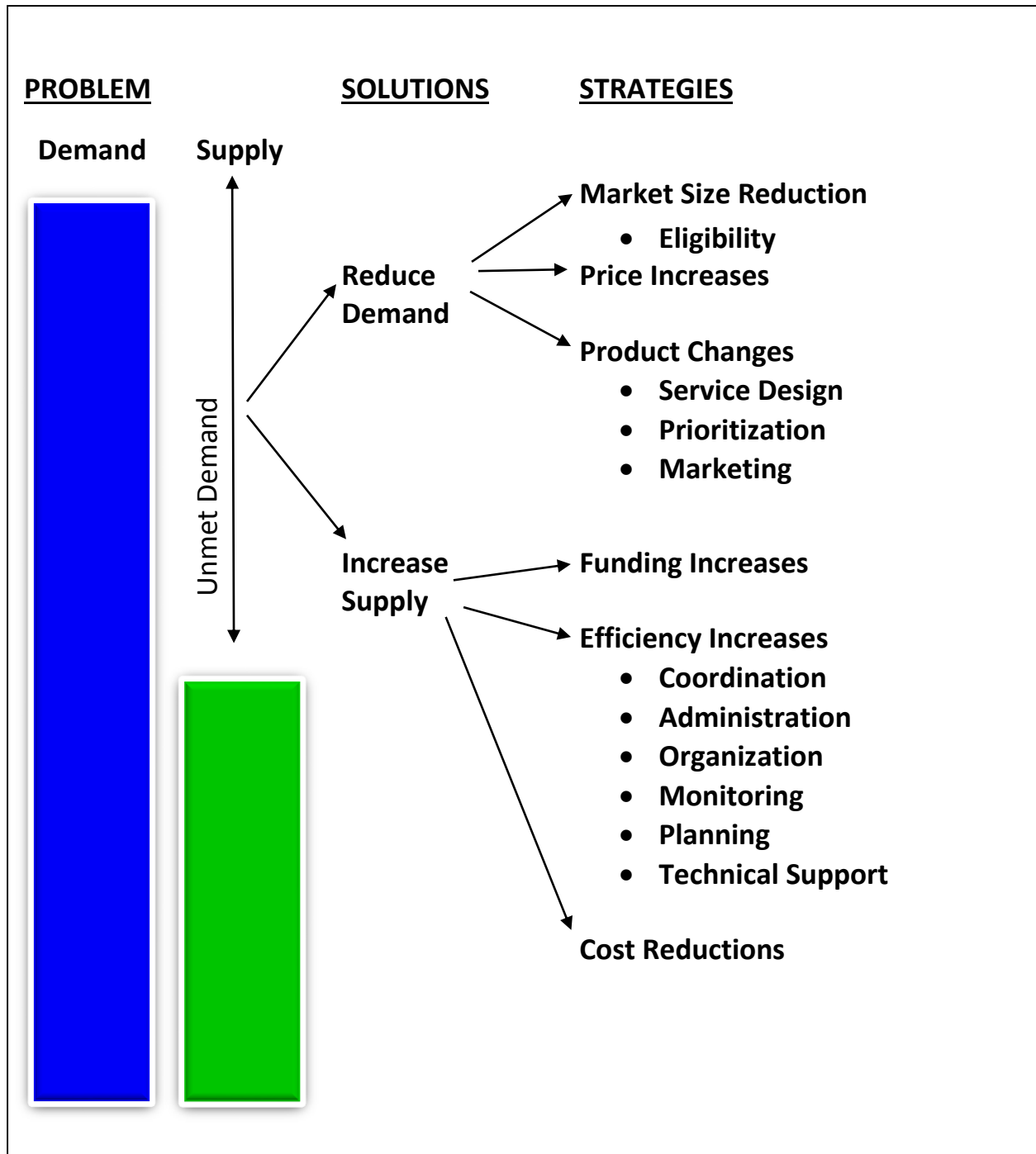
This study has documented that existing transit dollars are not sufficient to meet essential transit needs of Maine residents. Current funding does not provide sufficient resources to meet the minimal level of service target (20% of the estimated transit demand) which is considered essential. However, until such time as additional resources become available, there are steps that MaineDOT

can take to enhance the use of Federal Transit Administration and existing state funding to maximize the delivery of general public transportation throughout Maine.

It is important to note that, as shown in Chapter 6, the productivity and performance of Maine transit systems is below peer group averages and national averages on the performance measures presented in this plan. This means there are some technologies and methods of service delivery that can be transferred from successful peer state services to Maine transit systems to improve performance. Or there might be other steps to reduce demand or increase the supply of services with technical assistance to improve operations and organization of the transit services.

These steps are conceptualized on the following page in *Figure 16: Strategies for Reducing Unmet Demand*. There are primarily two ways MaineDOT can cope with insufficient funds: reduce or influence demand so that demand is lessened for transit or increase the supply (with strategies that do not require additional funds or that find additional funds and increase the supply).

Figure 16: Strategies for Reducing Unmet Demand



Adapted from: What Fare is Fair? For the Florida Transportation Disadvantaged Commission by CUTR, University of South Florida with Peter Schauer Associates, Tampa, Florida, November 1993, page 4.

Regulating the demand for transit is not easy, and most communities dismiss the techniques for regulating demand as too political, or so loathsome, they are considered beyond the realm of possibility. Nonetheless, they represent tools that in some situations are useful. Market size reduction by limiting the geographic area served is a common method for reducing demand, notable in many communities because public transit rarely has the funding to go everywhere in any geographic area. Reducing the demand for transit can also be had by changes in the transit service itself, such as hours of service or route changes. These techniques are common and instituted by default due to lack of available funds. Less common is changing the eligibility requirements to ride, but this is difficult for public transit, which by definition serves all. The demand for transit can also be reduced by prioritization of trips, meaning one type of rider gets preference over another type of rider with services designed only for medical trips or only for the elderly. Prioritization is difficult under FTA rules which allow service designs to maximize participation by given types of riders but do not allow prioritization of trip type.

Long term regulation of demand involves land use decisions to make communities more transit friendly (meaning pedestrian friendly environments) and working with providers of high demand services, hospitals, large employers and schools, to coordinate hours so as to maximize the potential for transit to serve as many high demand services as possible. Regulating demand also involves encouraging builders and developers to site buildings for ease of transit access (such as maximum setbacks instead of minimum setbacks) and encouraging density in harmony with transit routes as opposed to sprawl development— all techniques which are well known to be problematic. Reducing the demand for transit by raising the price of using transit is somewhat easier than regulating the demand through land development or eligibility policies but can penalize those for whom transit is intended to benefit such as the elderly and job seekers.

Increasing the supply of transit services is the other method of meeting the unmet demand for transit trips. Supply can be increased by funding increases, cost reductions or efficiency increases. Efficiency increases focus on discovering those anomalies in coordination of trips, administration and organization of services, monitoring, and planning to find functions where activities could be enhanced and efficiencies found. All these activities focus on technical support in terms of careful assessment of functions and availability of tools to help bring about efficiencies and assistance in modifying or changing transit activities for greater efficiency.

Some of the above efficiencies and demand reduction strategies can be brought about by modifying the current processes and allocation formulas in the MaineDOT State Management Plan (mandated by the Federal Transit Administration). By making the modifications described in the following section on recommendations, more of the demand can be met. The recommendations are interlocking and form a whole which will contribute to meeting a 20% of the estimated transit need.

8.7 Recommendations

Recommendations are presented in this section to help implement the findings of this report and shape the findings into specific tasks and actions to improve public transit for the people of Maine over the next ten years. The development of the recommendations was a process that required many months of research and discussion with the staff of MaineDOT and the Steering Committee which resulted in recommendations that fit the overall goals of the MaineDOT.

The Steering Committee recognized that implementation of the recommendations will require paradigm shifts for some people in Maine, and they, as well as MaineDOT staff, offered thoughtful, constructive comments and suggestions in various forms throughout the development of the recommendations. Several particularly noteworthy comments from the Steering Committee are presented below:

Concerning expectations of public transit in remote rural areas, "It's time for people who live in remote rural areas to start thinking like Islanders: I have chosen where I want to live and know that by being out here I won't get the same level of services as people on the mainland."

Concerning the recent changes to social service transportation through the implementation of the MaineCare Brokerage System and its impact on general public transportation, "After 30 years of history operating one way, everyone (especially service providers, customers, municipalities, and the state) need to get the message that 'it's a whole new world' regarding public transit." This comment was closely followed with:

Concerning communication of the new paradigm for public transit, "It will require a lot of outreach, education, and marketing for everybody to understand that it's a "whole new world."

8.8 Introduction to Recommendations and Prioritization

At the fifth Steering Committee meeting on April 8, 2014 a "Concept Paper" was presented which set in motion an ongoing discussion of what the final recommendations of this report should be. The study research team noted several problems that were emerging from the inventory of services and the investigation of the operating environment for public transit in Maine. The problems presented and discussed were

- Fractured public and specialized transit systems due to MaineCare brokerage
- Age of bus fleet with many vehicles beyond their useful life
- Lack of service in some rural areas and partial service in most urban and rural areas
- Disproportionate state/federal funding in some rural systems
- Inadequate state funding
- Lack of municipal/local governmental support of all types for public transit

- Public unawareness in some regions that they could get rides on existing services
- Future large increase in populations of elderly persons and persons with disabilities

Conceptual, tentative recommendations were presented which addressed the above problems. Throughout the remainder of the study period, from April 2014 to January 2015, and through the remainder of the Steering Committee meetings, the recommendations were shaped, honed and improved, culminating in an activity with the Steering Committee on November 20, 2014, where the recommendations were discussed in detail and ranked by the committee members in attendance.

Based on the rankings and guidance provided at the November Committee meeting, a technical memorandum was prepared: *Steering Committee Prioritization of Recommendations from Draft Final Report of the Maine Strategic Transit Plan, November 19, 2014* (posted with January 15, 2015 Steering Committee Summary Minutes at MaineDOT website). The technical memorandum and revised recommendations were presented to the Steering Committee at the January 15, 2015 meeting and the recommendations were revised once again. The final list presented below reflects the guidance provided to the study team by MaineDOT staff, but not any specific overall prioritization by the Steering Committee. Figure 17 presents an overall summary of the recommendations as they relate to the three goals for public transit.

A key assumption throughout this process of revising the recommendations was that additional funding for public transit was not immediately available, and that it would need to be sought, but given other funding needs and priorities of the department transit funding could not be the top priority. Importantly, if additional funding could not be found in necessary amounts, recommendations were needed to improve public transit in Maine irrespective of the funding available. Hence, a broad range of recommendations were developed, some requiring additional funding and others requiring a readjustment and refocusing of funds put toward current public transit activities. The recommendations are divided into groups by their relative relationship to MaineDOT goals. As a practical matter of implementation, many of the recommendations are intertwined and may be initiated simultaneously, regardless of their relative priority.

Figure 17: Goals and Recommendations

Goal 1: Manage the Existing System. Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.

- a. Improve and Update the State Management Plan
- b. Elevate and Clarify the Message that MaineDOT’s Focus is on General Public Transportation
- c. Administer State, Federal, and Local Funding for Public Transportation
- d. Improve the Grant Decision Making Process
- e. Use Population Density of a Geographic Area to Determine Types of Service Offered
- f. Use a Demand Based Capital Priority Setting Process
- g. Establish and Use Performance Measures and provide technical assistance to increase the efficiency and effectiveness of sub-grantees.

Goal 2: Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.

- a. Support General Public Transportation Systems
- b. Support a Mix of Transit Services
- c. Support New Systems and Expand Existing Services
- d. Encourage Volunteer Networks and Alternatives to Traditional Transit Services.
- e. Provide incentives for local communities and transit providers to leverage new sources of private funding for transit services.
- f. Explore ways to Increase State and All Sources of Potential Funding for Public Transportation

Goal 3: Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

- a. Establish a Public Transportation Advisory Group
- b. Expand Education, Outreach, and Marketing
- c. Reinvigorate Provisions of Maine Revised Statutes Title 30-A, Part 2, Subpart 5, Chapter 163 Concerning Regional Transportation Corporations and Transition to Government or Quasi-governmental Governing Bodies

8.9 Description of Recommendations

Goal 1: Manage the Existing System. Effectively manage Maine’s existing transportation system for safety and effectiveness within reliable funding levels.

Recommendation 1-A:

Improve and Update the State Management Plan

Continue to improve and update the State Management Plan (SMP) as a tool for efficient management of state and federal transit funds. The recommendations in this plan will require changes to the current MaineDOT SMP, which should be undertaken with input from the Public Transportation Advisory Group and service providers. This may also necessitate changes in the Locally Coordinated Plans and inclusion of transit development plans (TDPs).

Recommendation 1-B:

Elevate and Clarify the Message that MaineDOT’s Focus is on General Public Transportation

Continue efforts at coordination of all state and federal monies related to transit but focus on supporting public transportation. MaineDOT’s stated mission is: “To responsibly provide our customers with the safest and most reliable transportation system possible given available resources.” MaineDOT defines customers broadly and strives to meet the travel and mobility needs of all the residents of Maine and visitors to Maine. As such, MaineDOT’s primary responsibility is public transportation targeted to provide service to the general public, including seasonal services for visitors, often with special consideration to persons who are disabled or elderly but always with the general welfare of all persons in mind. All services provided with state financial assistance must be open to the general public at all times. The central recommendation concerning the focus of MaineDOT is for MaineDOT to continue efforts at coordination of all state and Federal monies related to transit, but to move away from supporting any exclusive social service transportation. This means:

- The Department of Health and Human Services (DHHS) is responsible for implementation of MaineCare non-emergency medical transportation and other social service transportation.
- MaineDOT and Federal Transit Administration funds should not be used to support the operating and capital needs of brokers or exclusive (closed door) passenger transportation service by MaineCare providers. (Capital and fully allocated operating expenses should be included in the bid rates of brokers and service providers, and in the billing rates that transportation providers negotiate with brokers.)
- “Coordination” efforts should continue at the state government level and implementation at the local level should be through mandated Federal Transit Administration Locally Coordinated Transit Plans.

Recommendation 1-C:

Administer State, Federal, and Local Funding for Public Transportation

On a regular basis, MaineDOT should advertise the availability of funds for general public transportation in each of the counties and encourage the submission of applications from appropriate governmental and quasi-governmental bodies, per provisions of Maine Revised Statutes Title 30-A, Part 2, Subpart 5, Chapter 163 and other relevant statutes. It should require that applicants for such funding document the specific general public services that will be offered and how the services will address the maximum percentage of estimated unmet needs for public transportation. Require that during the course of the grant period, successful applicants document the nature and extent of such services including numbers of one-way trips, and that such documentation be provided apart from other public transportation services that may be offered or provided.

For ease of data analysis and allocation of funds, redefine the general public transportation regions to a system of service areas based on county boundaries. To facilitate the change to county boundaries, MaineDOT should prepare 5-year Transit Development Plans (TDPs) which contain specifications for service needed to meet the 20% need level in each county. Those specifications should be used to bid services to eligible recipients to provide general public transportation services in a region. (Note: a region may be constituted of one or more contiguous counties.)

Revise allocations of state and federal funding to reflect the criteria and considerations described below. MaineDOT provides available streams of state and Federal Transit Administration funds for public transportation. Other entities – municipal or public/private partnerships – should be expected to provide a minimum level of financial support through establishment of a mandated farebox recovery ratio or comparable funding in lieu of farebox revenues. Users or beneficiaries of public or private services should also be expected to contribute to the cost of the service. This means that:

- 20% of each provider’s operating budget must come from “local sources” (i.e., not state or other USDOT sources). Farebox is one component of local community financial support, as are contributions from local governmental units or private entities including those who pay for services from service providers.
- Federal Transit Administration formula funds for rural areas should continue to be allocated based on the area being served and the level of service provided.
- Level of service ratings (A, B, C, D or F) should be a critical factor used, along with other measures, in allocating resources.
- Resources should be concentrated in the areas that have the greatest potential impact toward increasing the level of service to a minimum C level of service before state or federal

funds should be used to enhance service above the minimum. Local funds, including private funds, may be used at any time to increase the level of service above the minimum.

- State funds for use in urbanized areas should continue to be available for eligible programs such as enhanced services for elderly or disabled passengers.
- Funding should be focused on services appropriate to the geographic area served:
 - Fixed route systems in urbanized areas (investing in the existing fixed route systems to help them meet minimum Maine-based level of service standards)
 - Flex route systems in small urban areas (investing in the existing flex route systems to help them meet minimum Maine-based level of service standards and investing in new systems that increase services)
 - Intercity services (investing in existing systems to meet minimum standards and/or new systems that meet level of service standards)
 - In rural and remote rural areas (the greatest degree of inventiveness and creativity will be necessary for meeting the needs in rural and remote rural areas such as using uncompensated or compensated volunteer networks or investing in mobility managers and other site specific services to facilitate coordination with intercity services or other remote rural services.)
 - Seasonal services with a to-be-defined minimum level of support from private and local public sources.

Recommendation 1-D:

Improve the Grant Decision Making Process

Establish uniform and comprehensive service standards to equitably distribute funds and evaluate new proposals for funding and service delivery. Customer Service Levels provide the overall quality of public transportation available in a service area, graded in five levels from Excellent to Unacceptable. Performance measures evaluate the effectiveness and efficiency of the transportation provider in that area in attaining the defined Customer Service Level. The “percentage of theoretical demand for public transportation being met” as calculated by formula should be used as a measure. Maine-based service standards by area (i.e., urbanized, small urban, rural, rural remote and seasonal services) should be used in decision making. This means:

- Each type of transit service area should be evaluated by level of service (A, B, C, D, or F). Level C being the service type meeting 20% of the theoretical demand for trips in a given geographic area with each service in the geographic area contributing proportionately to meeting 20% of the theoretical demand..
- Level of service should be based upon criteria appropriate to the area served, but the overarching measure should be the percent of demand being met.

- Applications for funding should be prioritized and preference should be given to projects attempting to achieve Level C standards and above.
- Reallocation of funds to meet the goal of 20% may include reducing or eliminating funds from systems underperforming for an extended period of time. For example, identifiable routes or services provided by an agency may not be able to reach the minimum level of service, and available funds should be directed to more potentially productive service.

In addition, the application submission method should shift to a streamlined, web-based, online application process. Officials in other states indicate they are exploring grants management software, meaning a system that can facilitate the grant application process, selection process, invoicing, reimbursements, and reporting, which may include performance management and National Transit Database components.

Recommendation 1-E:

Use Population Density of a Geographic Area to Determine Types of Service Offered

The principal factor in what, if any, public transportation options are available to a person is where that person lives and the relative population density of a given geographic service area. The level of service available to the general public will be based on Census Bureau determinations used by the FTA and FHWA regarding urbanized areas, small urban areas, and rural areas. This means people who live in various settings may expect the following types of service:

- Urbanized areas. People can expect to be served by fixed route systems and ADA paratransit.
- Small urban areas. People should be able to be served by flex route systems or other appropriate service methods, although these services do not currently exist in all small urban areas.
- Rural areas. People may be served by flex route systems and/or volunteer networks or other appropriate service methods, although these services do not exist in all rural areas.
- Rural areas connected to urbanized and small urban areas. People in some areas are served by publicly supported intercity services, but many areas have no such service.
- Remote rural/frontier (six to ten persons per square mile). People cannot expect general public transportation will be available to them, and by necessity they will have to be more self-sufficient with respect to their need for transportation. In these remote rural areas consideration should be given to establishing state only funded “micro-services” to minimize the range of Federal compliance requirements if additional funding can be found.

Recommendation 1-F:

Use a Demand Based Capital Priority Setting Process

Prioritize capital support so funds are directed to services meeting the higher percentage of demand. Continue to explore options for extending the life of vehicles including maintenance technical assistance and reallocation of vehicles between systems and states. Create internal asset management protocols to forecast the need for the future replacement of transit vehicles as well as construction or improvements to transit facilities.

Recommendation 1-G:

Establish and Use Performance Measures and provide technical assistance to increase the efficiency and effectiveness of sub-grantees.

Develop performance measures and performance goals in concert with financial aid recipients (i.e. sub-recipients) to quantify the efficiency and effectiveness of individual transit systems. As was noted in earlier sections of this report Maine transit providers are not in the upper quartile of achievement when compared to peer states or national averages and there are possible improvements in efficiency and effectiveness that could be achieved with appropriate technical assistance. Quantifiable measures should be used by MaineDOT to assist in discovering which systems are efficient and effective and for allocating funds among possible providers.

- Public transit services receiving MaineDOT financial assistance must annually establish service performance measures and goals which assess the performance of the transit system in relation to those goals. The goals should be submitted to MaineDOT as a part of the application for funding. Public transit services must prepare and submit quarterly to MaineDOT within 30 days from the end of the period a report on the service effectiveness in relation to the performance measures and goals. At a minimum, goals shall be established for the following performance indicators and measures:
 - Total unlinked passenger trips per Total service area population
 - Total unlinked passenger trips per Theoretical demand for trips (Theoretical demand as defined for the service area as presented in this document)
 - Total vehicle revenue hours per Total service area population
 - General Administration expense per Unlinked passenger trip
 - Operating expense per Unlinked passenger trip
 - Total General Administration and Operating expenses per Unlinked passenger trip
 - Total General Administration and Operating expenses per Vehicle revenue miles
 - General Administration expense per Vehicle revenue hours
 - Operating expense per Vehicle revenue hours
 - Total General Administration and Operating expenses per Vehicle revenue hours
 - Total all revenues per Total General Administration and Operating expenses

- Total of farebox revenue per Total General Administration and Operating expenses
- Unlinked passenger trips per Vehicle revenue miles
- Unlinked passenger trips per Vehicle revenue hours
- Unlinked passenger trips per Vehicles available for annual maximum service
- Vehicle revenue miles per Vehicles available for annual maximum service
- Vehicle revenue hours per Vehicles available for annual maximum service
- Fatalities per 100,000 vehicle revenue miles
- Injuries per 100,000 vehicle revenue miles
- Complaints per 1,000 unlinked passenger trips
- Compliments per 1,000 unlinked passenger trips

If a service does not meet its goals further analysis should be conducted including a time trend analysis to discover why the goals have not been met. Technical assistance and training, including specific forms of assistance and peer-to-peer networking, should be provided through MaineDOT to improve goal attainment when warranted.

Goal 2: Support Economic Opportunity. Wisely invest available resources to support economic opportunity for our customers.

Recommendation 2-A:

Support General Public Transportation Systems

Continue support of systems contributing proportionately to meeting at least 20% of the theoretical demand for a given geographic area but focus any additional new monies for general public transit on areas of greatest need (those areas not meeting 20% of the demand or geographic areas with no service). Encourage the development of systems in rural areas modeled after existing rural systems that best serve the general public.

Use the application process to direct federal and state funds to providers that could better serve a given area or assist existing providers to improve services. If changing service providers is determined to be the best course of action, take steps to ensure that changing providers will not leave a rural area without transit service.

Recommendation 2-B:

Support a Mix of Transit Services

Continue to support a mix of intercity, fixed route, flex route and seasonal flex route and mobility manager services throughout the state. Identify customer service levels and performance measures and assist underperforming systems in their efforts to:

- Better market their services
- Expand hours of operation and frequency of service
- Improve connections to other modes
- Innovate to improve services, including the use of techniques that have proven successful in other systems
- Apply for available federal funds and grants
- Understand and meet federal requirements.

Recommendation 2-C:

Support New Systems and Expand Existing Services

To the extent possible within the limits of available funding and in recognition of the goal of achieving services to meet 20% of the theoretical demand, support efforts to expand and improve existing systems or establish appropriate new systems or appropriate services in areas with limited or no transit service, in particular expanding volunteer networks and alternatives to traditional transit services. This will help increase the overall availability of services in order to begin meeting the minimally acceptable levels of demand throughout the state.

Recommendation 2-D:

Encourage Volunteer Networks and Alternatives to Traditional Transit Services

Encourage the development and use of volunteer networks to serve rural and remote rural areas. Fixed and flex route service should be the primary method of public transportation service in the urbanized and small urban areas. Limited, less frequent flex route service or demand response service may be appropriate in some rural and remote rural areas, but the bulk of public transportation in remote/frontier rural areas will by necessity have to be provided by volunteers. Volunteer networks can provide “feeder service” to centralized pickup points for fixed, flex, or intercity service.

Efforts should be directed to expanding alternatives to traditional transit services. This may include providing appropriate technical, operating and capital assistance to groups or individuals such as those who provide faith based services, social services, vanpools, carpools and web based ride matching services. These efforts should especially be focused on rural and remote rural areas with no traditional or organized public transit services.

Recommendation 2-E:

Provide incentives for local communities and transit providers to leverage new sources of private funding for transit services.

MaineDOT should provide incentives for communities to study new public/private transit models and leverage private dollars for transit through its RFPs for competitive grant programs. Both for-profit businesses and nonprofit providers have shared interests in better transit services that can help them attain desired outcomes (e.g., more business, better access for clients to services) and reduce their costs (e.g., customers or clients showing up on time for appointments). Private interests could pay a transit provider directly to cover costs or could contribute to funding transit through mechanisms like transit districts. MaineDOT should also assess the potential to use social impact bonds (SIBs) or “pay for performance” models to expand the pool of financing for transit services.

Recommendation 2-F:

Explore ways to Increase State and All Sources of Potential Funding for Public Transportation

Meeting 20% of the theoretical demand for public transportation and raising customer service levels to at least a C rating would require \$7.4 million to \$14 million more than is currently available for operating transit in Maine each year. In addition it would cost an estimated \$9.5 million per year for capital costs to continue services at their existing levels and another \$1.1 million to \$2.1 million in capital expenditures to meet 20% of the theoretical demand so additional sources of all funds will need to be explored.

Goal 3: Build Trust. Demonstrate our core values of integrity, competence, and service, both individually and organizationally.

Recommendation 3-A:

Establish a Public Transportation Advisory Group

Establish an advisory group akin to the Steering Committee to assist in implementing the recommendations of this study, as well as other matters regarding general public transportation in the state. The purpose of the Public Transportation Advisory Group is to advise the MaineDOT on policies and matters related to public transit and the allocation of resources. The membership composition should include citizen users of public transit, agency and other stakeholder groups with constituencies that use public transit, representatives of local governments, transit industry representatives, representatives of relevant safety and regulatory groups and relevant advocacy representatives such as highway users, community development and economic advocates and others as appropriate to the needs of securing broad and thorough guidance for MaineDOT public transit activities.

Recommendation 3-B:

Expand Education, Outreach, and Marketing

Work with all providers in a coordinated effort with community members, (especially those serving rural areas of Maine) to improve public education, outreach and marketing. Many people in Maine are simply not aware of public transportation options that are already available to them. Data from the state-wide telephone survey, for example, showed that 2/3 of Mainers did not know or could not name their local bus service. Successful implementation of many recommendations will rest on the public's ability to know these services exist.

Outreach and marketing must be directed to audiences beyond potential customers. The network of organizations that need to be aware of public transportation includes, for example, developers, employers, community planners, state and federal agencies that provide service, medical service providers, members of chambers of commerce, and others.

Recommendation 3-C:

Reinvigorate Provisions of Maine Revised Statutes Title 30-A, Part 2, Subpart 5, Chapter 163 Concerning Regional Transportation Corporations and Transition to Governmental or Quasi-governmental Governing Bodies

In an effort to gain increased local understanding, knowledge, and support of all types and coordination move to limit "eligible recipients" for state transit aid to governmental or quasi-governmental bodies such as municipalities, groups of municipalities operating through inter-local agreements, transit districts, regional transit authority, Regional Transportation Corporations or similar entities. After a three year phase-in period, private non-profit agencies or for profit

corporations that operate transit systems may do so only under a contractual agreement with an appropriate governmental or quasi-governmental governing body if they wish to receive state or federal financial assistance, unless they are also legally identified as operating under one of the previously identified structures, i.e., a non-profit that is also a Regional Transportation Corporation.

8.10 Summary of Chapter 8

There are a variety of activities that MaineDOT can engage in to increase the supply of public transit, ranging from difficult tasks such as reducing the demand to what is often considered the most expedient: increase the funding for transit through the discovery of additional revenues from public or private sources. Since this report was charged with determining the amount of transit needed and the cost to provide it, the chapter focused on revenue needs for services both to maintain the status quo and to expand services to meet the estimated demand.

To continue services as they exist today and replace vehicles beyond their useful life would require additional funding of \$300,000 each year for administration/operations and \$9.5 million in capital funds each year for the next ten years.

To expand services at the current lowest best cost levels to meet the minimal 20% of theoretical level of demand would cost an additional \$7.4 million annually and at the higher average cost it would cost \$14 million annually. For the 2015 to 2025 time period the total needed for expanding service and replacement of vehicles is estimated at between \$172 million and \$238 million.

Sources of funds to maintain the status quo or to increase services are not apparent and will require further action by some combination or all of the following groups: MaineDOT, the Maine State Legislature, counties, municipalities, private interested persons, and providers of public transit.

Maine is in the lowest quartile of states providing state allocated funding for public transit and during the most recent reporting period for which data is available for all states, currently provides 40 cents per capita compared to a seven state peer group weighted average of \$2.82. If the state could find resources to increase support to the weighted average, an additional \$3.2 million per year would be available to support transit. However this would still be below what is needed to meet the minimal theoretical trip making needs of Maine residents.

Seventeen specific recommendations aligned with the three primary goals were offered in this chapter.

If MaineDOT implements the recommendations in this report and if additional funds as described can be identified, the people of Maine will find their transportation options increase and improve. Access to Maine businesses, health care facilities and community resources will grow and many Maine residents, particularly elderly Mainers and Mainers with disabilities, will find their lives enhanced.

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APPENDIX A:**Availability of Transit for Elderly – Fixed Route and Large Flex Route Systems**

Availability of Transit for Elderly – Fixed Route and Large Flex Route Systems			
Transit System	Communities Served	# of Persons 65+	Median Age
Citylink	Auburn	3,515	39.9
	Lewiston	5,673	37.4
Community Connector	Bangor	4,754	36.7
	Brewer	1,622	41.1
	Hampden	943	40.8
	Orono	1,075	21.8
	Old Town	1,081	33
	Veazie	320	43.4
METRO	Portland	8,337	36.7
	Falmouth	1,878	45.3
	Westbrook	2,662	39.4
South Portland Bus Service	South Portland	3,408	39.4
ShuttleBus	Biddeford	3,258	38.3
	Old Orchard Beach	1,631	47.8
	Saco	2,646	41.9
Bath CityBus	Bath	1,401	41
Brunswick Explorer	Brunswick	3,685	41.4
Kennebec Explorer	Augusta	3,454	43.2
	Hallowell	584	50.5
	Gardiner	835	40.9
	Waterville	2,623	36.8
	Winslow	1,390	43.6
Sanford Transit	Sanford	3,138	40.5
Total		59,913	

(United States Census Bureau)

APPENDIX B:
Population Projections

Population Projections					
County	Population 2010	Population 2015	Population 2025	Population 2030	Change 2015-2025
Androscoggin	107,702	110,410	114,848	116,622	4,438
Aroostook	71,870	70,883	69,125	67,923	-1,758
Cumberland	281,674	284,273	288,910	290,101	4,637
Franklin	30,768	30,501	29,779	29,337	-722
Hancock	54,418	53,106	50,323	48,745	-2,783
Kennebec	122,151	121,675	120,238	118,930	-1,437
Knox	39,736	40,280	41,252	41,516	972
Lincoln	34,457	33,143	30,597	28,158	-2,546
Oxford	57,833	57,514	56,774	56,194	-740
Penobscot	153,923	153,750	156,350	157,493	2,600
Piscataquis	17,535	16,956	15,753	15,091	-1,203
Sagadahoc	35,293	35,157	34,777	34,435	-380
Somerset	52,228	51,642	50,069	49,008	-1,573
Waldo	38,786	38,763	38,224	37,662	-539
Washington	32,856	32,472	31,637	31,065	-835
York	197,131	199,299	202,171	202,471	2,872
Maine	1,328,361	1,329,824	1,330,827	1,324,751	1,003

(U.S. Census 2010 and Maine Office of Policy and Management)

APPENDIX C:**Local Municipal Financial Support for Transit Systems FY 2012**

Local Municipal Financial Support for Transit Systems FY 2012			
Fixed Route Systems			
	System	Provider	Local Support
	METRO	Greater Portland Transit District	\$3,030,873
	South Portland Bus	City of South Portland	\$715,870
	Citylink	Lewiston/Auburn Transit Committee	\$439,234
	Community Connector	Bangor	\$628,503
Flex Route Systems			
	ShuttleBus	Biddeford Saco Old Orchard Beach Transit Committee	\$345,000
	Kennebec Explorer	Kennebec Valley Community Action Program	\$160,443
	Bath CityBus	City of Bath	\$51,924
	Downeast Transportation, Inc.	Downeast Transportation, Inc.	\$84,585
	West's Washington Co.	West's Transportation	\$75,731
	Sanford Ocean Shuttle, Sanford Transit, WAVE	York County Community Action Corporation	\$164,340
	Brunswick Explorer	Coastal Trans, Inc.	-

Local Municipal Financial Support for Transit Systems FY 2012 (Continued)			
Rural Transportation Systems by Region			
	MaineDOT Region 1	Aroostook Regional Transportation System	None reported
	MaineDOT Region 2	Washington Hancock Community Agency	None reported
	MaineDOT Region 3	Penquis Community Action Program	None reported
	MaineDOT Region 4	Kennebec Valley Community Action Program (exclusive of Brunswick Explorer	None reported
	MaineDOT Region 5	CoastalTrans, Inc.,(exclusive of Brunswick Explorer) and Waldo Community Action partners	None reported
	MaineDOT Region 6	Regional Transportation Program	\$16,618
	MaineDOT Region 7	Western Maine Transportation Program, Community Concepts, Inc.	None reported
	MaineDOT Region 8	York County Community Action Corporation (exclusive of Sanford Ocean Shuttle, Sanford Transit, WAVE)	None reported

(Maine Department of Transportation, *Locally Coordinated Transit Plans 2013-2017*)

APPENDIX D:**How Maine's Transit Providers are Governed Now**

How Maine's Transit Providers are Governed Now				
Provider	Method of Governance			
	Board	City Council	Community Action Program	Private Corporation
Regional Providers				
ARTS	X			
WHCA			X	
Penquis			X	
KVCAP			X	
Coastal Trans	X			
WCAP			X	
RTP	X			
WMTS	X			
YCCAC			X	
Intercity Provider				
Cyr				X
Fixed Route				
Citylink	X			
Community Conn.		X		
Metro	X			
South Portland		X		
Flex Route				
Bath		X		
DTI	X			
ShuttleBus	X			
West's				X

(Rothe, Telecommunications)

APPENDIX E:**Cost to Maintain Existing Services at 1.5% Annual Inflation Rate**

Cost to Maintain Existing Services at 1.5% Annual Inflation Rate				
	2012	2015	2020	2025
Intercity Services				
Cyr	\$430,732	\$450,407	\$485,216	\$522,716
ShuttleBus Intercity	\$319,118	\$333,695	\$359,484	\$387,266
ShuttleBus Zoom	\$406,287	\$424,846	\$457,679	\$493,051
West's Coastal Connections	\$178,881	\$187,052	\$201,508	\$217,081
Total	\$1,335,018	\$1,396,000	\$1,503,887	\$1,620,114
Fixed Route Services				
Citylink	\$1,457,314	\$1,523,882	\$1,641,653	\$1,768,527
Community Connector	\$2,369,972	\$2,478,228	\$2,669,756	\$2,876,085
Metro	\$6,344,733	\$6,634,550	\$7,147,295	\$7,699,666
South Portland	\$1,193,121	\$1,247,621	\$1,344,042	\$1,447,915
Total	\$11,365,140	\$11,884,281	\$12,802,746	\$13,792,193
Flex Route Services				
Bath City Bus	\$113,070	\$118,235	\$127,373	\$137,216
Brunswick Explorer	\$278,275	\$290,986	\$313,475	\$337,701
DTI Year Round	\$189,340	\$197,989	\$213,290	\$229,774
DTI Commuter	\$286,609	\$299,701	\$322,863	\$347,815
Kennebec Explorer	\$647,238	\$676,803	\$729,109	\$785,457
Sanford Transit	\$77,410	\$80,946	\$87,202	\$93,941
ShuttleBus Local Service	\$747,786	\$781,944	\$842,375	\$907,478
York WAVE	\$707,080	\$739,378	\$796,520	\$858,079
West's Washington County	\$76,263	\$79,747	\$85,910	\$92,549
Total	\$3,123,071	\$3,265,729	\$3,518,117	\$3,790,010

Cost to Maintain Existing Services at 1.5% Annual Inflation Rate (Continued)				
	2012	2015	2020	2025
Seasonal Flex Route Systems				
Island Explorer, Hancock Co.	\$1,804,666	\$1,887,100	\$2,032,943	\$2,190,057
Mountain, Sugarloaf Explorer	\$676,586	\$707,491	\$762,169	\$821,073
Shoreline Explorer, York Co	\$862,530	\$901,929	\$971,634	\$1,046,725
Total	\$3,343,782	\$3,496,520	\$3,766,746	\$4,057,855
Total: Intercity, Fixed Route and Flex Route Services	\$19,167,011	\$20,042,530	\$21,591,496	\$23,260,172
Demand Response General Public				
ARTS, General Public	\$386,002	\$403,634	\$434,828	\$468,434
Demand Response MaineCare, All Other	\$42,523,900	\$44,466,323	\$47,902,858	\$51,604,982

APPENDIX F:**5-Year Transit Capital Replacement Costs by Provider 2014-2018**

5-Year Transit Capital Replacement Costs by Provider 2014-2018		
Provider	Estimated # Buses to be Replaced	5-Year Plan Funding Need
ARTS	5	\$750,000
City of Bangor	17	\$4,930,000
City of Bath	3	\$210,000
BSOOB	7	\$1,310,000
CTI	14	\$1,160,000
Cyr	1	\$600,000
DTI	34	\$7,575,000
GPTD - Metro	20	\$9,076,940
KVCAP	24	\$1,719,750
LATC	7	\$2,900,000
Penquis	16	\$770,000
RTP	28	\$1,970,000
So. Portland Bus	4	\$1,530,000
WCAP	13	\$1,036,000
West's	7	\$535,000
WHCA	21	\$1,160,634
WMTS	37	\$3,799,000
YCCAC	19	\$2,140,000
Total	277	\$43,172,324

(MaineDOT)

APPENDIX G:**Purpose And Eligible Uses of State Funds, Amount, Source, And Distribution Method In Peer States**

Purpose And Eligible Uses of State Funds, Amount, Source, And Distribution Method In Peer States				
State	Purpose and eligible uses	Amount	Source of Funds	Method of distribution and comments
Maine	a. Non-fed match for operating assistance for urban and non-urban systems.	\$530,026	Off-road vehicle fuel tax Vehicle rental tax	Referred to as "State Funds Only." 2014 update: No longer "off-road vehicle fuel tax." Is now dedicated funding from rental vehicle tax and goes to transit, air, and rail systems allocated at discretion of the department. Transit funds allocated by formula established by transit unit. First divided 50/50 to urban and rural agencies. Urban allocated by same formula used by FTA §5307 to assign urban funds to 5 urban areas (population, population density, and number of low-income individuals). Rural allocated by same formula used to allocate FTA §5311 funds to 8 regional providers (regions % of population, % road miles, % sq. miles weighted equally.)
	b. Maine State Ferry System direct operating assistance	\$3,600,000	[Not listed]	Funded through 50% as Enterprise Fund (user fees) and 50% through Highway Fund. (Source: MaineDOT Work Plan CY 2013-2015, p. xviii) Maine constitution excludes use of revenue from motor vehicle fees, registrations, taxes, including fuel taxes, etc. for transit purposes. Maine State Ferry Service is part of the highway system.
Idaho	Non-fed match for capital (vehicles only).	\$312,000	State general fund from taxes allocated year-to-year	Discretionary allocation of state funds for 12% of non-federal match. Local sources provide 8% of non-federal match. (non-federal match totals 20%)

Purpose And Eligible Uses of State Funds, Amount, Source, And Distribution Method In Peer States (Continued)				
State	Purpose and eligible uses	Amount	Source of Funds	Method of distribution and comments
Montana	a. Operating, capital, or non-fed match funds	\$75,000	State gas tax to transit at a fixed amount.	Fixed amount distributed by formula to 6 general public transit districts.
	b. direct or match for 5311 operating funds (TransADE)	\$372,258	Motor vehicle revenue from title fees, vehicle registrations; amount determined annually	Montana Code Annotated 7-14-112 requires distribution in equal amounts to the 5 state <u>highway</u> transportation districts not aligned with 3 state transit regions. Law outlines factors to prioritize grant awards: census data for elderly and disabled, # of trips provided to same, coordination. Also, some transportation providers/communities have ability to raise match thru local use tax; transit unit considers when determining amount of state funds that will be provided.
New Hampshire	a. Non-fed match for operating and capital for 5311 intercity bus	Ops. \$271,136 Cap. \$3,493	State general fund.	2014 update: Distributed competitively based on need as described in application. Note: no state funds as match in 2014.
	b. Non-fed match for operating assistance	\$53,370	State general fund.	2014 update: NH is not providing funds for operations. All state funding goes to capital.
	c. Capital match for vehicles and facilities	\$166,500	State bonds every two years.	State funds to match Federal 5310 was allocated by formula to 10 regions based on population of elderly and disabled and state funds available. NHDOT contracts with one lead agency in each region. 2014 update: State funds for capital match no longer available.

Purpose And Eligible Uses of State Funds, Amount, Source, And Distribution Method In Peer States (Continued)				
State	Purpose and eligible uses	Amount	Source of Funds	Method of distribution and comments
North Dakota	Capital, operating, and/or admin (non-fed match or direct purchase) at discretion of sub-recipient.	\$3,150,000	Legislative appropriation from vehicle registrations, licenses, or title fees.	North Dakota Century Code 39-04.2 specifies formula to disperse the public transportation fund to counties. Base amount of allocation is 0.4% of the appropriation plus \$1.50 per capita to each county. Per capita amount is adjusted annually to distribute all funds approved for biennium. If more than one provider in a county, base amount is divided equally among them and per capita amount is based on the percentage of elderly and disabled ridership per provider.
Vermont	Non-federal match for capital and operating assistance including 5307, 5311, and JARC.	Ops. \$5,198,961 Cap. \$1,129,273	Legislative appropriation to public transportation in state budget. [All transportation funded thru revenues from gas tax, diesel tax, motor vehicle fees, purchase and use tax and other revenue.]	Vermont Statutes Annotated 24 V.S.A. §5091 sets use of Public Transportation Funding and formula to distribute funds to operate public transit systems. Formula specifies percentage of total and methods to calculate: percentage of elderly, youth, mobility limited, poverty, vehicle access, employment, congestion mitigation, economic development. Providers “held harmless” to baseline amount from FY2001.

Purpose And Eligible Uses of State Funds, Amount, Source, And Distribution Method In Peer States (Continued)				
State	Purpose and eligible uses	Amount	Source of Funds	Method of distribution and comments
West Virginia	Non-federal match primarily for operating assistance— but some capital - to non-urban transit 5311	\$1,757,022	Legislative appropriation from general revenue based on request from transit unit.	Overall allocation between operating and capital assistance determined by transit unit and depends upon state-wide need and legislative appropriation. State general revenue funds are only used to match FTA grants. No state funds are used to administer FTA grants.
	Non-federal match for capital for urban and non-urban systems	\$1,075,910		No state funds for operating assistance in urban areas or 5310 program. State funds are used for all of the rural non-federal match (20%) except 2 of 11 5311 grantees that have local levees; they do not receive any state funds for operating.
Wyoming	Non-federal match for operating assistance in urban and non-urban areas.	\$1,500,000	Unrestricted state highway funds to public transit account in amount allocated by legislature.	Gas tax revenue restricted to highway use only. Unrestricted state highway funds is a general fund appropriation Transit unit simultaneously allocates state funds with federal funds to balance need and equitably distribute all available funds.
	Purchase of public transit vehicles	\$995,659	Transportation Enterprise Account funded thru mineral royalty payments	Grants or loans for capital investments for public transportation and improvement and maintenance of airline service and facilities. Not a transit unit function; application to State Loan and Investment Board. Source viewed as “last resort.”

Bibliography

- AARP Public Policy Institute. *What is Liveable? Community Preferences of Older Adults*. Washington D.C.: AARP, 2014.
- American Association of State Highway and Transportation Officials. "Survey of State Funding for Public Transportation." 2012. *AASHTO Standing Committee on Public Transportation Web site*. Report. Web. 28 February 2013.
- American Public Transportation Association. "Economic Recovery Promoting Growth: The Benefits of Public Transportation." March 2012. *American Public Transportation Association Web site*. White paper. Web. 10 March 2014.
- Bay Area Transportation Authority. *Bay Area Transportation Authority Web site*. n.d. "About Us". Web. 7 March 2014.
- Brush, Andrea. "State of Michigan State Management Plan for Funding Under Sections 5303, 5304, 5310, 5311, 5316 and 5317 of the Federal Public Transportation Act." March 2011. 13 March 2014. Telecommunication and e-mail (document attached) with Tom Meyers. 2014.
- Burkhardt, Jon D and et. al. "TCRP Report 101: Toolkit for Rural Community Coordinated Transportation Services." 2004. *Transportation Research Board Online Publications Web site*. Report. Web. 7 March 2014.
- Cooper, Don. *Average household (vehicle) trips per day*. 27 January 2014. Telecommunication with Rich Rothe.
- Dowdy, Doug. Transportation Services Manager, Bay Area Transportation Authority, MI. Interview. 14 March 2014. Telephone call with Tom Meyers.
- Eastern Maine Development Corporation & Tom Crikelair Associates. "Linking the Rural Regions of Four Counties in Maine to Enhance Transportation Opportunities and Improve Quality of Life." February 2013. *Eastern Maine Development Corporation Web site*. Interim report. Web. 20 March 2014.
- FindLaw Web site. *49 USC 5311 (b)(2)(C)(9ii)*. 1 January 2014. Law. Web. 17 March 2014.
- Garber, Connie. Transportation Director, York County Community Action Corporation. Interview. 21 March 2014. Telephone call with Tom Meyers.
- Grand Traverse County. *Grand Traverse County Web site*. n.d. Web. 13 March 2014.
- Hooper, Kevin. *Average household (vehicle) trips per day* 27 January 2014. Telecommunication with Rich Rothe.

- Idaho Division of Transportation Performance. "2nd Annual Public Transportation Performance Report 2013 ." 2014.
- KFH Group, Inc. *2012 Vermont Public Transit Policy Plan, Technical Memorandum 1*. Technical Memorandum. Bethesda, 2011. Document.
- Lawlor, Joe. "Maine Panel Addresses Changes to Troubled MaineCare Rides System." *Portland Press Herald* 28 February 2014: Page 1. Newspaper.
- . "Phone calls show MaineCare transport mess persists." 17 September 2013. *Portland Press Herald Web site*. Newspaper article. Web. 20 March 2014.
- Leelanau County Government and Community Center. *Leelanau County Government and Community Center Web site*. 6 March 2014. "Home Page". Web. 13 March 2014.
- Maine Department of Transportation. "Federal Allocation for FY 2012." 19 July 2012. Letter.
- Maine Department of Transportation, Maine Department of Health and Human Services, and Maine Department of Labor. "Passenger Transportation Planning: Interagency Transportation Coordinating Committee." 2013. *Maine Department of Transportation Web site*. Document. Web. 5 March 2014.
- Maine Department of Transportation, Multimodal Planning and Operations Unit. "State of Maine Public Transportation Programs State Management Plan." Augusta, 2014. Wire bound document.
- Maine Military Authority. *Maine Military Authority Transit Bus Program Web site*. 24 June 2013. Web. 6 March 2014.
- Maine Office of Aging and Disability Services and Maine Department of Health and Human Services. "State Plan on Aging October 1, 2012 - September 30, 2016." 2012. *Maine State Documents Web site*. Document. Web. 2 March 2014.
- Maine Revised Statutes. *23 M.R.S.A. Section 4209* . 3 December 2013. State Statute. Web. 7 February 2014.
- Maine State Legislature, Office of Program Evaluation & Government Accountability. "Maine Turnpike Authority - Strong Planning Process Drives Bond and Toll Decisions." March 2015. *Maine State Legislature*.
- Maurer, Jessical L., Esq. "New MaineCare transportation broker system a mess." 9 January 2014. *Maine Association of Areas on Aging Web site*. Written testimony to the Maine State Joint Standing Committee on Health and Human Services. Web. 20 March 2014.

- McCrea, Nick. "Tourism officials unveil 5-year plan to build Maine's brand, continue growth of industry." 19 March 2014. *Bangor Daily News Web site*. Newspaper. Web. 20 March 2014.
- Michigan Department of Transportation. "2014-2018 Five-year Transportation Program." 23 January 2014. *Michigan Department of Transportation, Projects and Programs, Strategic Planning Web site*. Web. 13 March 2014.
- Michigan Department of Transportation, Bureau of Transportation Planning, Intermodal Policy Division. "Act 51 Made Simple." 29 August 2000. *Michigan Department of Transportation Web site*. Document. Web. 14 March 2013.
- Michigan Legislative Website. *Act 51 of 1951*. n.d. State statute. Web. 14 March 2014.
- Mildner, Curtis A., et. al. "MaineDOT Strategic Transit Plan 2025 DRAFT Research Report Revised." Draft survey results. 2014. Document.
- Northeast Oregon Economic Development District. "Baker, Union, and Wallowa Counties Coordinated Public Transit Human Services Transportation Plan." Adopted 5 September 2012. *Northeast Oregon Public Transit Web site*. Document. Web. 17 March 2014.
- Oregon Department of Transportation, Public Transit Division. *State Management Plan for Public Transportation Programs*. May 2012. Document. Web. 13 March 2014.
- Rothe Associates. "DRAFT MaineDOT Locally Coordinated Transit Plans; Region 2 for Maine State Ferry and Region 6 for Casco Bay Island Transit District." 2013. Documents.
- Small Urban and Rural Transit Center, North Dakota State University. "Rural Transit Fact Book 2014." 2015.
- "Steering Committee group exercise: Identifying Core Beliefs." 24 September 2013. Focus group working papers.
- Stone, Matthew. "Medicaid patients need rides to the doctor. How can Maine ensure they're reliable?" 7 February 2014. *Bangor Daily News web site*. Newspaper. Web. 20 March 2014.
- Thistle, Scott. "Problems continue to plague Maine's revamped medical ride dispatch program." 12 September 2013. *Sun Journal Web site*. Newspaper. Web. 20 March 2014.
- Transportation for America. *Aging in Place, Stuck without Options: Fixing the Mobility Crisis Threatening the Baby Boom Generation*. Washington D.C.: Transportation for America, 2014.
- Transportation, Vermont Agency of. "Public Transit Route Performance Reviews, Annual Report for State Fiscal Year 2013." 2014.
- . "Public Transit Route Performance Reviews, Annual Report for State Fiscal Year 2013." 2014.

- TranSystems Corporation, Center for Urban Transportation Research, Institute for Transportation Research and Education, Planners Cooperative. "TCRP Report 105: Strategies to Increase Coordination of Transportation Services for the Transportation Disadvantaged." 2004. *Transportation Research Board Online Publications Web site*. Report. Web. 19 March 2014.
- U.S. Census Bureau. "State and County Quick Facts." 2010. Web. 13 March 2014.
- United States Census Bureau. *2010 Census*. Washington D.C.: Department of Commerce, 2010.
- Urban and Regional Research Collaborative, The University of Michigan. "Michigan Transit Strategic Plan 2000 - 2020." May 2001. *Michigan Department of Transportation Web site*. Web. 13 Mar 2014.
- Vermont Agency of Transportation. "Annual Report for State Fiscal Year 2013." 2014.
- Weisbrod, Glen and Arlee Reno. "Economic Impact of Public Transportation Investment." October 2009. *American Public Transportation Association Web site*. Report. Web. 10 March 2014.