

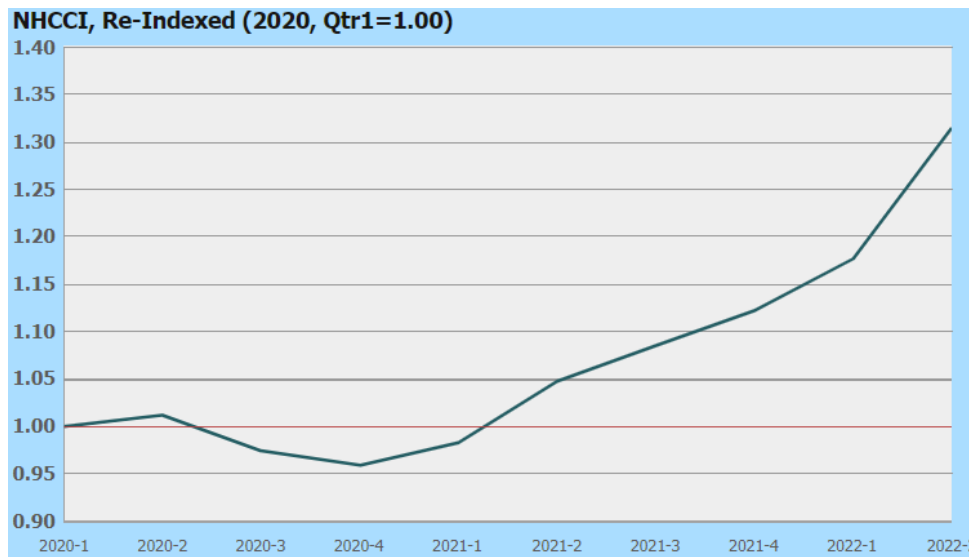
Introduction

This Work Plan describes all work planned by the Maine Department of Transportation and its transportation partners for calendar years 2023, 2024, and 2025. Published early each calendar year, all MaineDOT work plans since 2013 have included all capital projects and programs, maintenance and operations activities, planning initiatives, and administrative functions for three calendar years.¹ This Work Plan contains 2,599 work items with a total value of \$3.94 billion, consisting primarily of work delivered or coordinated through MaineDOT. It also includes funds to be expended by transportation partners that receive federal funds directly, including airports and transit agencies.

MaineDOT’s past two Work Plans were prepared during the COVID-19 pandemic. As we prepare this 2023 Edition, Maine and the nation collectively appear to have settled into a new normal. That new normal includes an overall rebound of highway travel to near pre-pandemic (2019) levels, changes in some travel patterns, and some significant lingering challenges, including tight labor and material availability and resulting construction cost inflation.

The National Highway Construction Cost Index (NHCCI) is a quarterly price index that measures the average changes in the prices of highway construction costs over time. As seen in the chart below, national highway and bridge construction costs have increased more than 30 percent since the start of 2020. Our experience in Maine has been generally consistent with this. Since the end of 2018, MaineDOT has experienced a 40-to-50-percent increase in construction costs.

Figure 1



¹ MaineDOT’s Work Plan is different from its Construction Advertisement Schedule, published early each January. The Construction Advertisement Schedule is a subset of the Work Plan; it contains only capital projects that are advertised for construction bids from private contractors for one calendar year. The Work Plan includes all work activities over three calendar years.

Thankfully, as will be explained below, potential increases in federal and state funding have allowed MaineDOT to address the challenge of increased costs and begin to take advantage of the opportunities available under the federal Bipartisan Infrastructure Law of 2021 (BIL). Therefore, despite significant challenges, there is reason for optimism regarding transportation in Maine. If we set reasonable goals that fit Maine’s needs, manage costs with practical ingenuity, and find the funds needed to match available federal funds, all Maine people can realize the enhanced safety, economic opportunity, and quality of life that comes with a better transportation future.

The following sections outline sources and uses of funds projected for this three-year Work Plan.

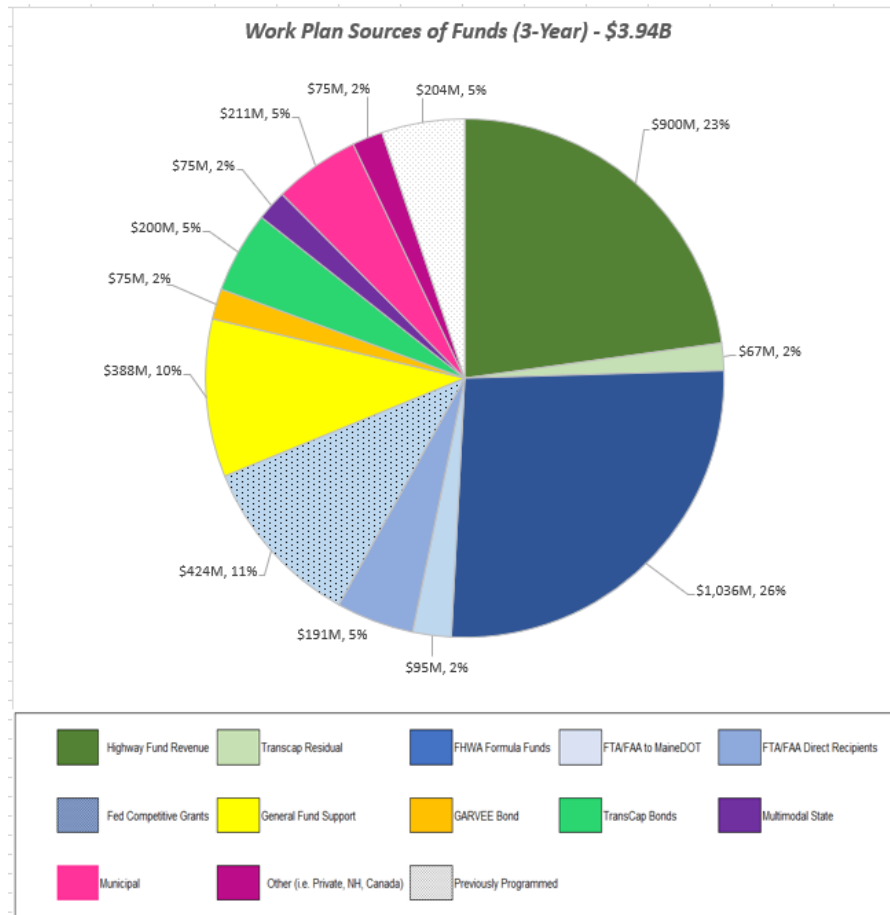
A. Sources of Funds

Any work plan requires that funding levels be estimated using reasonable assumptions. MaineDOT makes these assumptions with humility and respect. We know that decisions regarding funding are made by policymakers, not by MaineDOT. However, the reality is that to achieve the predictability that the public, policymakers, government officials at all levels, contractors, and consultants want and need, we need to assemble and publish a longer-term plan, looking ahead, in this case, three years. To prepare such a plan requires that we predict the future, including levels of available funding. Although doing so is necessary, it can be uncomfortable, because we do not want to look overly confident, unappreciative, or unaware of the many competing needs. We are very aware of our situation and know that we may need to adjust this plan to meet whatever policy decisions are made.

With that understanding, the major sources of estimated funding that support this three-year Work Plan are shown in the pie chart listed in *Figure 2* below. The sources are described clockwise and sequentially.²

² Although consistent, the amounts in this Work Plan Sources of Funds pie chart are not precisely the same as the sources information provided as part of MaineDOT’s testimony on state Highway Fund budgets for three major reasons. The first and most obvious reason is timing. MaineDOT Work Plans cover *three calendar years*, which is most helpful for construction season planning, while the Maine state budget covers *two state fiscal years* (July 1st to June 30th). *Federal fiscal years* are also different (October 1st through September 30th) and include variable schedules dependent upon federal budget bill status, continuing resolutions, etc. Second, the Work Plan funding includes sources that are not part of the state budget, principally federal FTA and FAA funds received directly by agencies other than MaineDOT and capital funds carried forward from previous years. Third, the Work Plan includes the total value of projects and activities, even if some amounts have already been expended (e.g. design and permitting costs).

Figure 2



1. State Highway Fund Revenues

State Highway Fund (H.F.) revenue sources, shown as the two green wedges in Figure 2, are derived largely from state per-gallon fuel fees and motor vehicle fees. Those total an estimated \$967 million and represent about 24 percent of the total value of Work Plan items. This revenue includes \$900 million in budgeted H.F. allocations (the dark green wedge) and \$67 million in funds passing through the TransCap Trust Fund at the Maine Municipal Bond Bank after debt service reserve requirements are met (the light green wedge). These TransCap residual funds are used to partially fund the popular and ubiquitous Light Capital Paving program discussed on page x below.

Highway Fund revenues are a primary, foundational funding source of MaineDOT Work Plans. Article IX, Section 19 of the Maine Constitution requires that Highway Fund revenues be used for specified highway- and bridge-related activities. Even so, these revenues provide some of MaineDOT’s most flexible funding, allowing us to fund almost all our maintenance and operations activities and other work without federal or bond-related restrictions. H.F. revenues allow us to maintain and operate our system, including conducting critical operations like snowfighting.

2. Federal Fund

Federal funding of all types, shown in various shades of blue in Figure 2 above, is estimated to be \$1,745 million, which represents about 44 percent of the total value of Work Plan items. This includes \$1,555 million to be received by MaineDOT and \$191 million to be received directly by other transportation partners, including airports and transit agencies.

Federal funds consist of several types, including core formula programs from the Federal Highway Administration (the largest segment), federal multimodal funds received by MaineDOT, federal multimodal funds received by other transportation partners (including airports and transit agencies), federal competitive grant funding, and assumed federal coronavirus relief funding. Each of these federal funding types generally includes extensive rules, restrictions, and guidance that designate and limit how the funding can be used. See Section B(1)(b) regarding Resource Allocation below. Each type of federal funding is described below.

a. Federal Highway Formula Funds. As noted above, funding for core federal highway programs from the Federal Highway Administration (FHWA) in this Work Plan, sometimes known as “formula funds,” is estimated at \$1,036 million. It is shown as the solid darker blue wedge in Figure 2 and represents about 26 percent of the value of Work Plan items delivered or coordinated by MaineDOT. These funding sources typically require a state or local match of at least 20 percent of the total cost of projects (sometimes significantly more).

b. Federal Multimodal Funds Received by MaineDOT. In addition to highway-related programs, MaineDOT receives about \$95 million of formula funding for non-highway modes over the three-year Work Plan period from the Federal Transit Administration (FTA), Federal Railroad Administration (FRA), Federal Motor Carrier Safety Administration, and U.S. Fish and Wildlife Service. Those modes include transit, rail, marine, and other programs that are administered by MaineDOT. This is shown as the solid light blue wedge in Figure 2 and represents about two percent of the total value of Work Plan items.

c. Federal Multimodal Funds Received Directly by Transportation Partners. Our transportation partners – largely airports and transit agencies – directly receive funding from the Federal Aviation Administration (FAA) and the Federal Transit Administration (FTA) outside the state budget process. These amounts total about \$190 million over the three-year period of this Work Plan and are shown as the medium blue wedge in Figure 2. These amounts are listed in the Work Plan because MaineDOT often provides a match for these funds. Such funds are required to be shown in other federally required plans because they provide a more comprehensive overview of our statewide transportation system investment.

d. Federal Competitive Funding. Special competitive U.S. DOT discretionary grant programs and Congressionally Directed Spending (CDS) are estimated at \$424 million and are shown as the polka-dotted blue wedge in Figure 2, representing about 11 percent of the total value of Work Plan items. This amount consists of \$268 million in awarded grants and \$156 million in awarded and anticipated CDS projects.

These special federal competitive funds have become a critical component of the fiscal foundation that supports transportation needs in Maine. It is the increase in these federal funding types, plus related state matching funds, that has been a game-changer for transportation funding for Maine in the recent past and is the biggest reason for the dollar growth of this Work Plan from previous plans. The awarded grants/CDS and future successful applications are an assumed portion of the funding of many other projects in this plan.

Projects supported by special federal competitive funding include the following. (Costs shown are total project costs, not the special federal competitive funding amount.)

Congressionally Directed Spending

- \$15.7 million – Searsport, U.S. Route 1 Reconstruction
- \$10.7 million – Dover-Foxcroft, Dover Bridge Replacement
- \$11.8 million – Edgecomb to Boothbay Harbor, Route 27 Rehabilitation
- \$16.8 million – Milbridge to Cherryfield, U.S. Route 1 Reconstruction
- \$20.6 million – Abbot to Greenville, Route 6/15 Highway Rehabilitation
- \$15.6 million – Van Buren, U.S. Route 1 Reconstruction
- \$22.8 million – Ashland to Eagle Lake, Route 11 Rehabilitation

Competitive Discretionary Grants

- \$35.5 million – Gray to Waterville, Rail Line Upgrades (2018 CRISI grant)
- \$42.5 million – Waterville to Mattawamkeage, Rail Line Upgrades (2021 CRISI grant)
- \$29.1 million – Lubec, Breakwater Upgrades (BUILD grant)
- \$58.1 million – Freight Reliability Bridge Replacements (2020 INFRA grant)
- \$80 million – Statewide Bridge Deck Replacements (2021 INFRA grant)
- \$60.1 million – Downeast U.S. Route 1 Rehabilitation (2022 INFRA grant)
- \$84.3 million – Presque Isle Freight and Mobility Priority Corridor (2022 INFRA grant)
- \$33.6 million – Sanford Downtown Improvements (2022 RAISE grant)
- \$34.9 million – Bangor, Interstate 95 at Hogan Road (2022 RAISE grant)

3. General Fund Support

In a trend consistent with experience at the federal level, as the amount of dedicated Highway Fund revenues has stalled, General Fund support has become a key component of funding for transportation. In Maine, Governor Mills and the Legislature recently provided unprecedented levels of General Fund support in the form of one-time transfers, bond proceeds, and cascade language. In total, that support averaged almost \$200 million per year in the current FY22-FY23 biennium. This support has allowed MaineDOT to match federal BIL funds and continue the low-cost preservation and maintenance of Maine's vast multimodal transportation system, including highways ineligible for federal funding. A significant portion of these funds will be used to support the first calendar year of this Work Plan.

Looking beyond this calendar year, this plan is again built upon General Fund support to match various types of federal funds and lower-cost state programs to support our capital programs. Shown as the yellow wedge in Figure 2, General Fund support totaling \$388 million is assumed over the three-year Work Plan period, representing about 10 percent of the total value of Work Plan items. The nature and extent of this support are consistent with the Governor’s recently released FY24-FY25 General Fund budget, which is subject to legislative review.

4. Revenue Bonding

a. GARVEE Bonds. This Work Plan also assumes the availability of about \$75 million in bond funds in Grant Anticipation Revenue Vehicle (GARVEE) bonding as allowed by the Federal Highway Administration. GARVEE bonds are revenue bonds repaid only with future FHWA formula funds. Shown as the orange wedge in Figure 2, the \$75 million in proposed new GARVEE bond issuances represents about two percent of the total value of Work Plan items. Authorization for GARVEE bond issuances is typically included in biennial Highway Fund budgets. This amount of bonding is measured, prudent, and in accordance with the state transportation debt policy outlined in 23 MRSA §1604, which provides that no more than 15 percent of such future federal funds are used for GARVEE debt service. These amounts allow for at least \$25 million in GARVEE bonding capacity to be reserved for unforeseen emergency needs.

b. TransCap Revenue Bonds. This Work Plan assumes \$200 million in new TransCap revenue bonds issued by the Maine Municipal Bond Bank pursuant to 30-A MRS §6006-G. Shown as the aqua wedge in Figure 2, this \$200 million in proposed TransCap revenue bonding represents about five percent of the total value of Work Plan items. Moreover, given the ability to use TransCap bond proceeds to match federal BIL funds, its impact on the Work Plan capital programs is significantly greater.

This TransCap revenue bonding represents a prudent, one-time continuation of an established capital transportation funding mechanism that will allow MaineDOT to address both the extraordinary challenge of construction inflation and the extraordinary opportunity to match available federal BIL funding. With General Fund support and other one-time sources, all outstanding TransCap revenue bonds will be paid off. That will allow the use of the existing Highway Fund revenue stream amount provided to the TransCap Trust Fund to issue revenue bonds totaling up to \$200 million in support of highway and bridge projects in this Work Plan. Authorization for these TransCap revenue bonds is contained in the Governor’s proposed FY24-FY25 Highway Fund budget.

5. State Multimodal Funding

Non-highway projects are funded through the Multimodal accounts in MaineDOT’s Highway Fund budget. These accounts rely on funding from various sources, including revenues from car rental taxes, aviation fuel taxes, island ferry service subsidies, rail taxes, rail leases, and Penobscot Narrows Observatory fees. This state multimodal funding is shown as the purple wedge in Figure 2. It totals about \$75 million over the three-year period of this plan and represents about two percent of the total value of the Work Plan items. Pending legislative approval of budgets, a portion of the General Fund support described in subsection 3 above is to be used for multimodal purposes, predominately for capital-related work.

6. Municipal Matching Funds

This Work Plan is also based upon the anticipated receipt of about \$211 million from municipalities. Shown as the red wedge in Figure 2, this represents about five percent of the total value of Work Plan items. This funding is largely derived through agreements with municipalities, reflecting the local benefit of projects and activities in the Work Plan. This includes local funding for transit operations, local bicycle and pedestrian project funding, airports, and MaineDOT's popular Municipal Partnership Initiative (MPI). The MPI program is a voluntary, low-process program in which municipalities take the lead on projects, and MaineDOT acts more like a funder and partner, providing high-level engineering guidance.

7. Other Funding Sources

This category captures less common but important funding from various sources, including from governmental agencies other than municipalities and from private sources. This category includes private shares funding, including significant projects like the Waterville to Yarmouth rail upgrades, Acadia Gateway Center, and the Saddleback Mountain Road. This category totals \$75 million over the three-year period of this plan, is shown as the maroon wedge in Figure 2 and represents about two percent of the total value of Work Plan items.

This also includes funding from private sources pledged pursuant to MaineDOT's Business Partnership Initiative (BPI). In a typical BPI project, the state contribution is capped at \$1 million, with the state share being one third of the total project cost. The remaining two thirds of project costs are typically split between a private business entity and a municipality.

8. Previously Programmed Funds

These funds represent amounts carried forward that were previously programmed, which is typical in a long-term capital program. Shown as the white hatched area in Figure 2, this represents five percent of the total value of Work Plan items. These amounts support projects and activities in multiple areas listed in the plan and include federal transit and aviation funding, state multimodal funding and bonding, and capital highway and bridge funding.

9. Funding Uncertainty

As noted above, each source of funds described requires assumptions and comes with risk from macroeconomic forces, inflation realities, competing priorities, and non-appropriation. Even when funding seems certain, many factors affect MaineDOT's ability to access that funding.

As this Work Plan is delivered, MaineDOT will adapt to such inevitable changes. If construction bid prices come in lower than anticipated or new funding becomes available, we will have projects ready to go to supplement the plan as we did in 2020. Alternatively, if state or federal funding does not materialize as expected or prices are higher than anticipated, we will defer projects as we did in the spring of 2019.

In the end, MaineDOT will remain agile so that we can put available funding to work as soon as prudently possible.

B. Uses of Funds

1. Principles and Processes

Uses of funds are determined by several factors, including long-term planning, data-driven technical asset management principles, resource allocation principles arising from funding eligibility and system priorities, asset management studies, community outreach, partnership initiatives, and project selection input from experts on various MaineDOT committees. Each of these factors is described below.

a. Long-Term Planning

At MaineDOT, 2022 was a time to reassess our long-term approaches and goals. For the first time, MaineDOT simultaneously updated several major long-term planning documents in a coordinated and comprehensive manner. We call the result our Family of Plans, which includes our *Long-Range Transportation Plan*, as well as modal plans for active transportation, transit, and rail. Originating from a pragmatic desire to deliver achievable results, MaineDOT uses a set of practical guiding principles, which frames how MaineDOT planning, development, implementation, and operations should be conducted. MaineDOT's three guiding principles, at their highest level, are as follows:

- Meet customers where they are.
- Be responsible stewards by making reasoned, long-term decisions.
- Improve continuously and embrace the future.

Early in the Family of Plans development process, engagement with the public, our partners, and stakeholders was crucial in helping us to identify customer needs across all modes. This input, along with system-wide existing conditions and needs assessments and an assessment of current trends impacting the future of transportation, helped us to craft our vision and goals for the transportation system. As the calendar year drew to a close, we released drafts of four key elements of our Family of Plans:

- The *Long-Range Transportation Plan* is MaineDOT's overarching approach and vision for responsibly providing a safe and reliable transportation system within available resources over the long term. It looks at the system as a whole and includes guiding principles, high-level goals, and strategies.
- The first-ever *Maine State Active Transportation Plan* assesses the current state of active transportation in Maine, identifies and evaluates the state's goals, and proposes an implementation plan to achieve those goals.
- The *Maine State Rail Plan* is a multi-year guide for focusing federal, state, and local investments on a rail system that supports the vision, goals, and objectives of the plan.

- The *Maine State Transit Plan* reviews existing conditions and needs to help identify potential system efficiencies, practices, and alternatives appropriate for Maine and new modes and approaches for providing needed public transportation in rural Maine.

Each plan in our Family of Plans provides guidance on setting priorities for system-wide and modal investments over both the short- and long-terms. With the recent passage of the BIL, MaineDOT recognizes the opportunity to seek special federal competitive funding to help realize some of the goals in our Family of Plans.

You can review the entirety of these plans or review two-page graphic summaries in this Family of Plans by visiting <https://storymaps.arcgis.com/stories/27763afe326645c285cb1d726ee68cae>.

b. Asset Management: Rational, Data-Driven, and Customer-Focused. MaineDOT has long used data-driven asset management strategies to allocate resources and prioritize projects. These strategies are outlined in MaineDOT’s Transportation Asset Management Plan (TAMP) as well as in asset-specific MaineDOT documents, including its Roads Report, Keeping Our Bridges Safe Report, Integrated Freight Strategy, Transit Asset Management Plan, Traffic and Mobility Plan, and Interstate Operating Plan. Federal performance targets and measurements also strengthen MaineDOT’s existing performance-driven processes. Using objective data, funding requirements, and the committee process outlined in subsection c. below, MaineDOT allocates resources and selects projects to maximize customer value from each available dollar. Asset management at MaineDOT is a continuous loop of planning, delivery, and measurement, as illustrated in *Figure 3* below.

Figure 3



c. Resource Allocation Principles: Funding Eligibility and System Priorities. Restrictions on using federal and state eligibilities largely determine the funding available for each expenditure category in the Work Plan. For example, a specific amount is allocated by FHWA for the National Highway Performance Program and another amount for the Congestion Mitigation and Air Quality Program. Aviation funding provided by the FAA must be used for aviation. Funding provided by the FTA must be used for transit. There is limited flexibility in the use of different funding sources across programs. This largely determines how much funding there is for certain modes and for certain uses within modes.

Within these limitations, resources are first allocated to “must-do” uses such as debt service, federal compliance, winter plowing, and critical safety needs.

Bridges are always a high priority due to obvious safety concerns and the fact that the loss of a single bridge can shut down an entire corridor.

Light Capital Paving (LCP), a popular, lower-cost-per-mile program that keeps more than half of the 8,800 miles of roads under MaineDOT jurisdiction in serviceable condition, is also always a high priority. Funding for the LCP program is complicated because its relatively short useful life (seven-year cycles) means that funding from current revenues is needed because it would be financially imprudent to use bonding and other types of funds for longer-term capital items. (Just like it does not make sense to take out a 10-year loan on a car that only lasts seven years.) Accordingly, funding for LCP relies on amounts passing through the TransCap Trust Fund at the Maine Municipal Bond Bank, year-end Highway Fund revenue, and General Fund transfers.

Further, using state funding to leverage all available federal funding is always a high priority due to the multiplier effect and because failure to deliver a project funded by a past competitive grant award jeopardizes the success of future awards.

d. Community Outreach and Partnership Initiatives. MaineDOT works closely with other state agencies, counties, municipalities, regional and metropolitan planning organizations, tribal governments, and stakeholder groups in a collaborative and coordinated manner to address the transportation needs in communities across Maine. Sometimes these needs fall outside the scope of MaineDOT’s essential asset management programs, which are properly focused on the need to support our economic competitiveness by maintaining the safe and reliable regional, statewide, and interstate movement of people and goods on our existing transportation system.

The more locally-focused transportation needs can vary. They can be as basic as resurfacing a road or as transformative as revitalizing a village, reconstructing a highway to enhance economic vitality, building new bicycle and pedestrian facilities, or expanding or adjusting transit options. As these needs are identified by partner groups, MaineDOT looks to partner with affected communities to find solutions.

To make solutions more likely, MaineDOT has established a suite of partnership initiatives to help communities meet their needs. These include our Planning Partnership Initiative, Municipal Partnership Initiative, and Business Partnership Initiative.

In 2022, we added our Village Partnership Initiative to MaineDOT's suite of community initiatives. This initiative aims to focus on projects in lower-speed areas where people meet, walk, shop, and do business on a human scale. Our iconic New England villages are part of who we are, part of our brand, and a key part of our economy and quality of life. Simply put, the goal of the Village Partnership Initiative is to make sure that once you get there, the *there* is a place you want to be. In this way, these projects can be bigger than transportation; they can become placemaking.

The Village Partnership Initiative has already resulted in a successful partnership between MaineDOT and the City of Sanford to secure a \$25-million Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant from the federal government. This funding will help support long-awaited revitalization efforts enhancing mobility and safety for all users in downtown Sanford. The following map highlights some Village Partnership Initiative projects that are in various stages of planning and development.

The following municipalities have partnered with MaineDOT and are in various stages of the Village Partnership Initiative process:

- **Bucksport:** We will conduct a transportation study that addresses deficiencies in pedestrian facilities and ADA barriers while working to improve traffic safety along Route 15 in the downtown area. We will also address streetscape improvements and active transportation connections to the waterfront.
- **Gorham:** Pedestrian-scale lighting is being added to South Street in the downtown area.
- **Monmouth:** The town is reconstructing sidewalks on Main Street, which is home to the public library and the Theatre at Monmouth.
- **Monson:** We will conduct a village corridor improvement plan focused on gateway treatments, slowing traffic into the village area, improving traffic turning movements, and encouraging active transportation and economic development opportunities along the core downtown.
- **Norway:** We will conduct a village improvement study focused on active transportation and pedestrian safety throughout the core downtown and consider the availability of parking and other economic development elements.
- **Orono:** We will perform a transportation feasibility study of the downtown core and Route 2 corridor through Orono, focusing on pedestrian safety, improvements to active transportation facilities, wayfinding, and parking analysis.
- **Pittsfield:** We will conduct a study to address pedestrian safety and active transportation connections between Maine Central Institute and Sebecook Hospital, address drainage along Route 11, and work to address the aesthetics and streetscape of the historic downtown.

- **Rangely:** We will conduct a transformative village study in the Oquossoc village area focused on active transportation elements, availability of parking adjacent to economic drivers, access management along two state routes, and truck turning movements at the village's largest intersection.
- **Rockport:** We will conduct a planning study to improve mobility in the constricted downtown area in concert with the planned renovation or replacement of the Pascal Avenue Bridge. The study will also plan pedestrian and bike access between downtown and public schools situated along Route 90.
- **Skowhegan:** We will conduct a comprehensive transportation feasibility study around the core downtown area and consider the impacts of an additional bridge location in the downtown, alternate-way traffic throughout the village area, and the many public and private investments within Skowhegan.
- **Woodstock:** We will conduct a placemaking plan along Route 26 in Woodstock's core village corridor, focusing on gateway treatments and active transportation elements as well as decorative lighting and street landscaping adjacent to a recently completed road reconstruction project.

e. Expert and Experienced Staff for Basic Asset Management. For assets that MaineDOT controls, like the state highway and bridge system, prioritization and selection of projects for the Work Plan is driven by MaineDOT staff committees: the Highway Committee, the Bridge Committee, the Multimodal Committee, the Safety and Mobility Committee, and the Management Team of the Bureau of Maintenance and Operations (M&O). These committees are comprised of staff from relevant disciplines and specializations. They include engineers and technicians with hundreds of years of cumulative experience.

The committees work throughout the year in conjunction with the Bureau of Planning to identify project candidates and prioritize them for potential inclusion in the Work Plan. Selection methodologies for these committees vary according to asset type and transportation mode, but the underlying asset management principles – managing the overall transportation system; using current, reliable data and rational scoring systems; and building in flexibility for unanticipated needs and developments – are common across all areas. In the fall of each calendar year, the committees review the last two years of the current Work Plan and make any needed adjustments in cost, schedule, and project scope. Once those adjustments are made, new projects are typically added for the third year of the Work Plan.

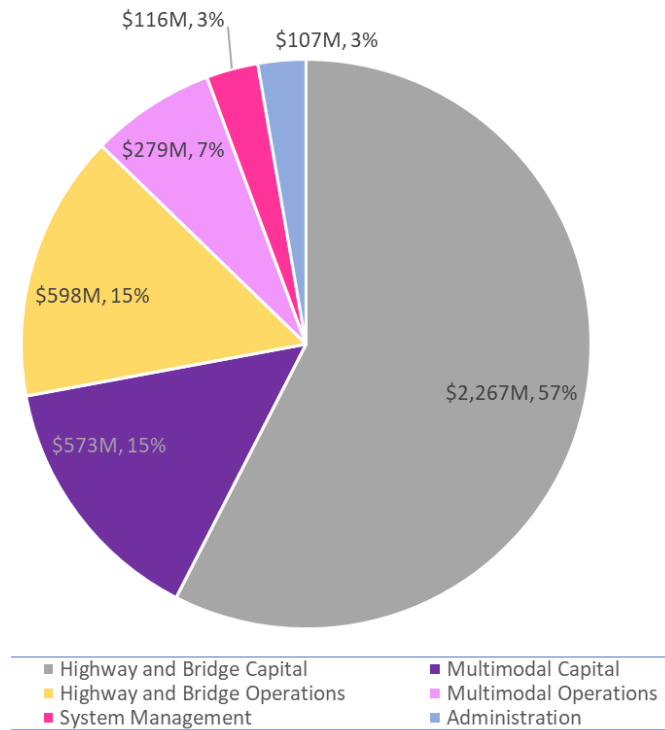
MaineDOT's Results and Information Office (RIO), with ongoing guidance from senior management, coordinates the work of the asset committees, receives input from the Bureau of Planning's public outreach efforts, and assembles a Work Plan. This detailed, arduous task is ongoing in earnest for the better part of seven months at the end of each calendar year.

2. Breakdown of Uses of Fund

The strategies and processes described above result in the listing and description of individual projects and work activities in the Work Plan. Individual projects can be best found online by searching by municipality or by work type. As shown in *Figure 4* and described below, activities in this Work Plan can be broken down into four high-level categories³: (a) capital work, including highway and bridge capital projects and multimodal capital work; (b) operational activities, including highway and bridge maintenance and operations and multimodal operations; (c) system management work; and (d) administration.

Figure 4

Work Plan Uses of Funds (3-Year) - 3.94B



a. Capital Work

This Work Plan includes more than \$2.84 billion in capital work. This represents about 72 percent of all MaineDOT activities. This focus on capital production distinguishes MaineDOT from most governmental agencies. This capital work consists of more than \$2.2 billion in

³ The categories of Uses of Funds for this Work Plan are based upon asset- and activity-based use categories in MaineDOT management systems and include all funding sources for three years. They are different from the Use of Funds pie chart categories provided with MaineDOT budget information, which include only amounts affected by the state budget system over two state fiscal years. Major differences between the two include FTA and FAA funds expended directly by agencies other than MaineDOT, amounts expended by municipalities, and capital funds carried forward from previous years.

highway and bridge projects and nearly \$573 million in multimodal capital projects. Capital projects are major improvement projects with defined beginning and ending dates. This work includes bridge replacements, highway construction, and paving, acquisition of buses and ferries, sidewalk construction, and major improvements to airports. Most capital projects in this Work Plan have undergone or are currently undergoing engineering and will be constructed by private contractors selected through a competitive bidding process.

i. Highway and Bridge Capital Projects

The largest and most heavily used component of Maine’s transportation system is its 8,800-mile, state-jurisdiction highway network. Our need to invest in preserving the existing highway and bridge system is significant. This three-year Work Plan directs nearly \$2.2 billion to highway and bridge capital projects, including the following:

- 302 bridge projects – estimated cost: \$706 million.
- 271 miles of highway construction and rehabilitation – estimated cost: \$475 million.
- 264 highway safety and spot improvements – estimated cost: \$190 million.
- 1,178 miles of preservation paving – estimated cost: \$575 million.
- 2,073 miles of Light Capital Paving (LCP) – estimated cost: \$116 million.

As noted above, MaineDOT manages more than half of the 8,800 miles of highway under its jurisdiction with the Light Capital Paving (LCP) program. It is our most visible and lowest-cost-per-mile program. As part of the ongoing quest to squeeze the most value from each existing dollar, MaineDOT has expanded the use of LCP, resulting in the need to do 700 miles per year in the long term, dependent on conditions, funding, winter severity, etc. Funding for LCP traditionally comes from cash resources, principally funds passing through the TransCap Trust Fund at the Maine Municipal Bond Bank after debt service reserve requirements are met. This Work Plan will rely on General Fund support as described in the sources section of this document to supplement the traditional funding mechanism. This remains an ongoing challenge to meet the shortfall in cash resources to meet the LCP need every year.

The bar charts that follow show the total cost of most highway and bridge capital projects in the Work Plan that are funded for construction, including the costs of construction, engineering, and right of way (property acquisition).

Figure 5

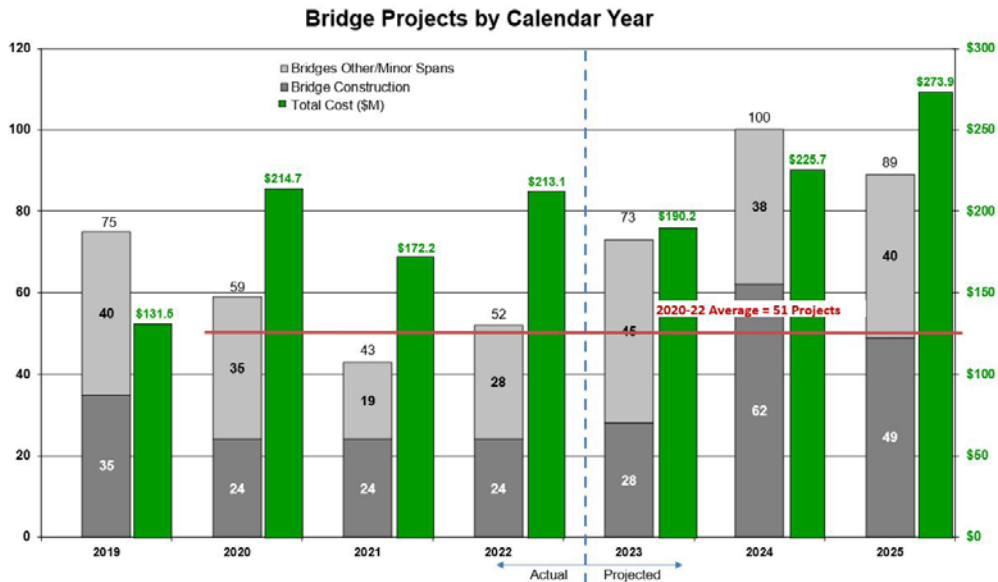
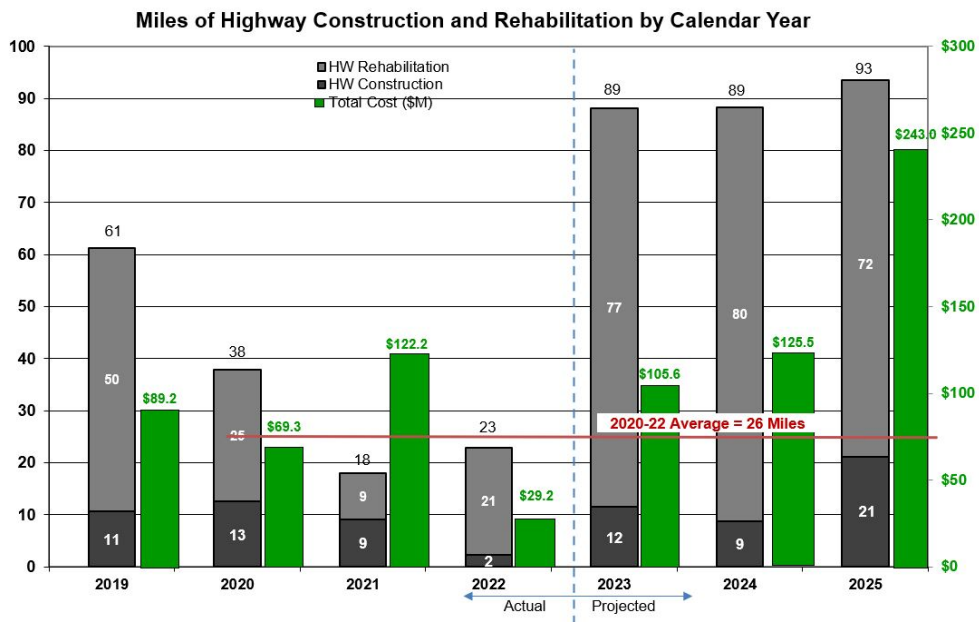
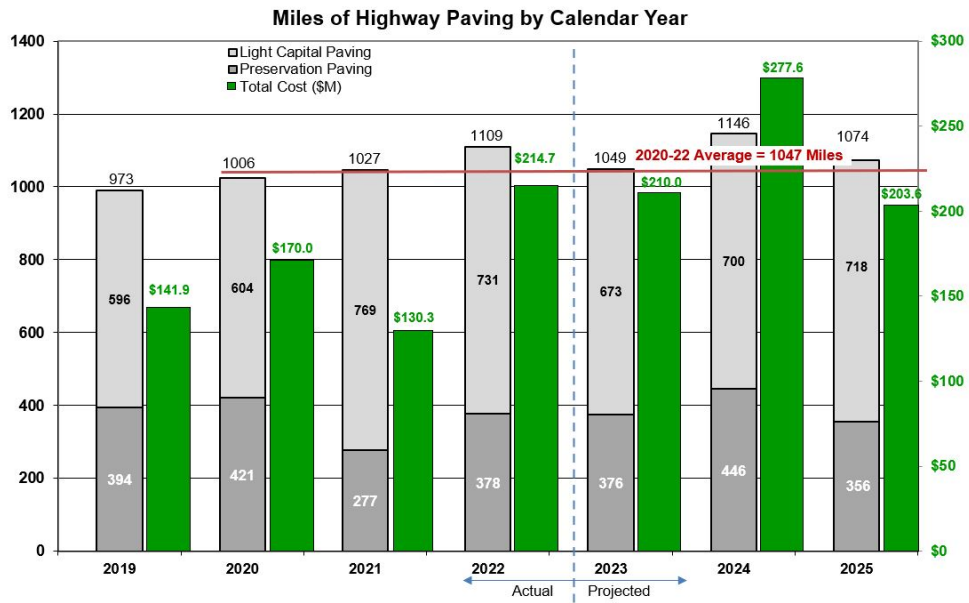


Figure 6



The increase in highway reconstruction and rehabilitation efforts directly results from increases in discretionary grant funding under the BIL and related state funding efforts. Although very important to customers, this kind of work is out-of-reach financially when resources become more constrained because we focus on holding together what we have through paving efforts rather than making the longer-term investment in improvements.

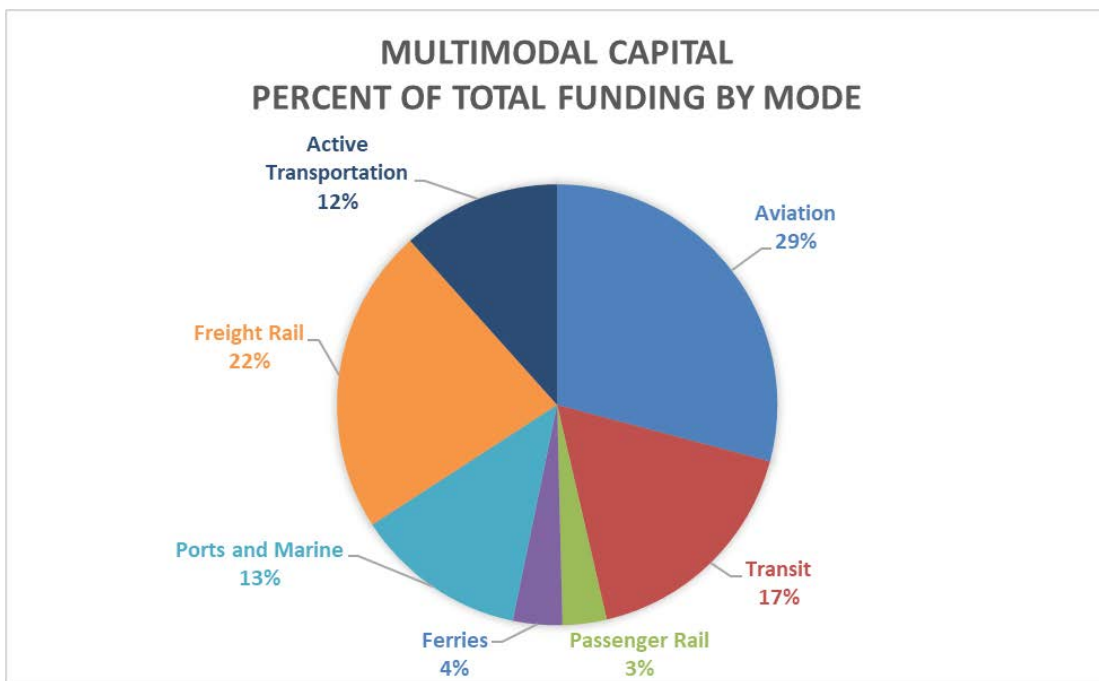
Figure 7



ii. Multimodal Capital Work

Multimodal capital work includes all other non-highway capital work. MaineDOT will invest \$573 million in multimodal capital projects in this Work Plan, including investments in the specific modes below.

Figure 8



Active Transportation Capital Projects. This Work Plan provides nearly \$68 million for active transportation capital projects, including \$46.5 million in funding for 82 stand-alone active transportation projects, encompassing nearly 42 miles in 45 different communities across Maine. This is in addition to other projects funded as a part of highway, bridge, or other capital projects that also integrate active transportation improvements. Sidewalks, pedestrian crossing improvements, off-road transportation-related trails, and projects that address the safety of vulnerable roadway users and ADA compliance concerns are all examples of these enhancements.

Active transportation highlights include:

- Investing in pedestrian safety improvements in 12 Heads Up! focus communities. These communities were identified as experiencing a disproportionate number of pedestrian crashes from 2012 to 2017, and these projects represent an ongoing commitment by MaineDOT and the focus communities toward improving pedestrian safety (\$11.1 million).
- Construction of 1.4 miles of off-road trail to close a gap on the Eastern Trail located in Scarborough and South Portland. This section of trail includes two critical spans for active transportation over the Nonesuch River and the Downeaster rail line. This project will be the largest active transportation project MaineDOT has undertaken in more than a decade, with construction anticipated to begin in late 2023 (\$6 million).
- Investing in Safe Routes to Schools in five communities across the state to improve the safety of and promote walking and bicycling to school through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school (\$2.5 million).

Aviation. This Work Plan provides \$169.5 million for aviation capital needs statewide. Projects include runway and taxiway reconstruction, safety improvements and devices, and other enhancements to improve airport access and support economic development.

Airport highlights include:

- Automated Weather Observation Systems (AWOS) upgrades across the state (\$3 million).
- Completing the Maine State Aviation System Plan-Phase II, which is part of MaineDOT's Family of Plans (\$820,000).

Transit. This Work Plan provides more than \$100.4 million in transit capital funding investments. This total includes federal, state, and local funds. These investments provide support to Maine's 22 regional and local transit providers. MaineDOT oversees procurement and management of the state transit fleet and ensures compliance with federal requirements and continued eligibility for federal funding.

Transit highlights include:

- Matching funds for electric buses and infrastructure in Portland and Biddeford (\$2.5 million).

- Rural worker/workforce transportation funding opportunities for projects aimed at connecting workers to employment opportunities, especially in rural areas where transportation options are limited (\$5 million).

Passenger Rail. This work plan provides \$18.8 million for passenger rail capital needs statewide, including capital assistance to the Northern New England Passenger Rail Authority (NNEPRA) Downeaster passenger rail service. The Downeaster, operated by Amtrak, provides five daily round trips between Boston’s North Station and Brunswick, serving 12 stations and including stops in Wells, Saco, Old Orchard Beach (seasonally), Portland, and Freeport.

MaineDOT works closely with NNEPRA to determine investments in passenger rail in Maine. In accordance with the Maine State Rail Plan, there are substantial investments in passenger rail that are ongoing or in the planning stages for the near term. This work is subject to funding, which in many cases will require discretionary grants. Work includes the Wells Station Double Track and Platform (\$31 million), Positive Train Control (\$100 million), Portland Station Relocation (\$35 million), West Falmouth Train Platform Parking, Thruway and Commuter Bus Connection - Lewiston-Auburn and Portland, and a Rockland Branch Coastal Connection Service Extension Pilot (TBD).

Freight Rail. This Work Plan provides \$131 million in freight rail capital funding. The investments will include operational improvements on state-owned rail lines, improvements at railroad crossings, and improvements to critical rail bridges and other rail line capital projects. Included in that total is \$77.5 million for investments in the Pan Am Railways freight mainline and \$12.2 million for the Industrial Rail Access Program (IRAP), which leverages private funding.

Freight highlights include:

- The Maine Woods to Water Rail Connection Project involves various improvements on freight rail lines between Millinocket and Searsport, including rail yard expansion, rail line rehabilitation, and an improved connection to the port (\$11.4 million – pending approval of a 2023 CRISI grant application for a total project cost of \$56.8 million).
- A project on CSX’s Waterville-Mattawamkeag line will replace approximately 75 miles of rail, including approximately 55,000 ties, upgrade 72 grade crossings, and reinforce five bridges in central Maine. These improvements will allow heavier freight cars and increased speeds (\$42 million).
- A project on CSX’s Waterville-North Yarmouth line will rehabilitate and modernize 75 miles of mainline track, eight bridges, and 89 rail crossings (\$35.5 million).
- The Maine Northern Rail Improvement Project will rehabilitate and improve more than 138 miles of track in northern Maine (\$16.2 million – 2022 CRISI grant recipient).

Ferries. This Work Plan provides about \$21.1 million for the Maine State Ferry Service (MSFS), Frye Island Ferry Service, and Casco Bay Island Transit District (CBITD) capital projects, including funding for ferry rehabilitation and infrastructure improvements at various locations.

Ferry services provide vital connections for Maine’s island communities. The MaineDOT-run MSFS serves six islands: Frenchboro, Islesboro, Matinicus, North Haven, Swan’s Island, and Vinalhaven. CBITD vessels currently serve six islands: Peaks Island, Little Diamond Island, Great Diamond Island, Cliff Island, Long Island, and Chebeague Island.

Ferry highlights include:

- Construction of a new hybrid ferry to serve CBITD/Casco Bay Lines (\$4.2 million).
- Support for capital improvements for the Frye Island Ferry Service (\$1.2 million).

Ports and Other Marine Investments. This Work Plan provides nearly \$75 million in funding for Maine’s marine infrastructure. Maine’s three deep-water seaports in Eastport, Searsport, and Portland are critical links in the state’s freight transportation network. Together, the three ports handle a wide variety of marine cargoes, including container, liquid, and dry bulk; petroleum products; and project cargo. MaineDOT and the Maine Port Authority are working together to identify projects at these seaports to enhance existing infrastructure and allow for new businesses to call on those facilities. This is especially important to keep pace with growth for existing businesses as well as to keep Maine’s ports competitive as the world recovers from the COVID-19 pandemic.

This Work Plan also supports many of Maine’s smaller harbors and ports. The Small Harbor Improvement Program (SHIP) helps municipalities across the state improve or create marine facilities such as public wharves, piers, landings, and ramps. The Boating Infrastructure Grant (BIG) program is a funding opportunity from the U.S. Fish and Wildlife Service that supports improvements to public or private facilities that benefit certain recreational boats.

Ports and harbors highlights:

- Upgrading the International Marine Terminal in Portland with a wharf infill and expansion, which will allow for larger vessels to berth at the facility. MaineDOT anticipates seeking federal funding for this project (\$5.7 million).
- Funding further study, scoping, planning, and design efforts to advance marine terminal concepts in Searsport related to offshore wind (\$2 million).

b. Operations Work

Operational activities at MaineDOT, including administration, can be broken down into highway and bridge maintenance and operations, multimodal maintenance and operations, and department operations.

i. Highway and Bridge Maintenance and Operations

Maintenance and operation of Maine’s extensive highway and bridge system – a subset of the Statewide Operations listings – accounts for a large portion of MaineDOT’s overall work activities. This work is essential to the movement of people and goods and to the health of the Maine economy. It is also an essential and cost-effective means of protecting the state highway and bridge system. From year to year, and within CY2023, actual expenditures for this work

will depend on the constantly changing condition of the transportation system and, importantly, on the weather. For those reasons, overall expenditures for routine maintenance and operation of the highway and bridge system are shown in the Work Plan as approximate annual budget figures. Highway and bridge maintenance and operations work accounts for \$598 million in this Work Plan, while three-year annual averages for major maintenance and operations work include:

- \$12.2 million in bridge and structural maintenance.
- \$5.6 million in bridge and other infrastructure inspections and inventory.
- \$17.1 million in custodial maintenance.
- \$23.9 million in drainage maintenance.
- \$6.9 million in operational and safety maintenance.
- \$11.9 million in surface and base maintenance.
- \$52.8 million in winter maintenance.

ii. Multimodal Operations

Multimodal operations cover maintenance and operations of all non-highway infrastructure, including transit, passenger rail, ferry, and aviation operations. MaineDOT has included \$260 million for multimodal operations in this Work Plan.

Active Transportation Operations. MaineDOT's Active Transportation Program supports local and regional efforts to improve the walkability, bikeability, livability, and social vibrance of communities. Support is provided through educational programming, on-site technical assistance, and grant funding to design and construct active transportation infrastructure improvements. This Work Plan provides more than \$3.2 million for active transportation operations.

Transit Operations. Maine's 22 transit providers provide coordinated service to users within and between communities around the state. Transit operations work items include transit planning, administration, and operating support for these services, including relaunching and running the GO MAINE program, in partnership with the Maine Turnpike Authority, with the goal of growing and expanding the existing program (\$1.5 million). This Work Plan provides \$156.1 million for transit operations.

Passenger Rail Operations. The Northern New England Passenger Rail Authority (NNEPRA) manages the *Downeaster* passenger rail service, which runs five trains per day from Brunswick to Boston. This Work Plan provides \$53.1 million for these passenger rail operations, which help provide greater connectivity between Mid-Coast Maine and the Greater Boston area.

Ferry Service Operations. The Maine State Ferry Service (MSFS) connects Islesboro, North Haven, Swan's Island, Vinalhaven, Frenchboro, and Matinicus with the mainland. This Work Plan provides \$48.6 million for MSFS operations.

Aviation Operations. This Work Plan provides \$1.95 million for operations at the Augusta State Airport, one of two state-owned airports.

c. System Management Work

System management is necessary to achieve the department’s mission for the entire multimodal transportation system. These activities include continuously monitoring the performance and condition of transportation assets and assuring that the projects and scopes selected achieve the most customer value. System management also involves ensuring that we are meeting customer expectations and system needs while meeting compliance requirements and doing so within available resources. This work includes asset management, planning, environmental work, compliance, and safety efforts. The value of such work in this Work Plan totals \$116 million, or three percent of the total value of Work Plan items.

d. Administration

Administration includes executive functions, finance and administration, human resources, most non-crew training, legal, information technology, federal compliance activities, and other traditional administrative activities needed to support any large and complex organization. The value of such work in this Work Plan totals \$107 million – less than three percent of the total value of Work Plan items.

Annually recurring work items for various MaineDOT work units that perform system management and administration work appear as three annual listings. These and other activities are provided in the Statewide Operations tab.

C. Unmet Need: The Question Has Changed

As noted in the cover letter to this Work Plan, providing safe and reliable transportation in Maine will always be a big challenge due to basic demographics and geography. Our relatively low population is spread out across a large, mostly rural state with topography, water bodies, geology, and weather that – while varied and beautiful – present challenges from an infrastructure perspective. This means that transportation needs will always exceed available funding in Maine, as they do in most states across the country.

The last time the question of unmet need was analyzed outside of MaineDOT was in March 2020, just before the pandemic impacts struck the nation. At that time, which seems much longer than three years ago, the Blue Ribbon Commission to Study and Recommend Funding Solutions for the State’s Transportation Systems found that Maine’s unmet capital transportation need was about \$330 million *per year* if annual General Fund general obligation bonding is not considered. See <https://legislature.maine.gov/doc/4091>.

Much has changed since then. Costs have continued to escalate, long-term planning efforts have taken place, the federal Bipartisan Infrastructure Law (BIL) was enacted, and labor and material shortages have continued. Essentially, the transportation funding challenge has changed. Previously, we quantified what everyone knew was a huge unmet need and looked for state solutions alone to chip away at it. With the federal BIL (which has about four years remaining) and robust support from the General Fund, the question for the next few years is how much

federal funding we can leverage – largely through competitive discretionary grants. The policy of the state is to maximize federal funding and prudently monitor construction costs and invest to assure value. Doing so will allow us to move beyond MacGyver mode and continue the shift from making do to making pragmatic progress.

It is challenging to estimate the maximum amount of federal funding available when much of it is now in the form of grant program funding, for which you must apply and win. Despite the challenge, based upon Maine’s track record – which includes good applications for projects that are ready (in both a technical and public support standpoint) and great support from our Congressional delegation – MaineDOT estimates that we need about \$265 million per year in state capital resources outside of the Highway Fund budget to maximize federal funding available under the BIL. Thus, even with recent robust General Fund support, available state match is likely to remain the limiting factor in maximizing federal funding. Moreover, most state capital support is one-time in nature, making long-term planning and project delivery challenging.

The question regarding unmet need has morphed into a question of reliability and sustainability of state capital funding outside of current Highway Fund resources. MaineDOT still requires reliable, sustainable state capital funding just to address cost increases and maintain MacGyver mode. That is estimated at \$100 million to \$150 million per year, largely due to construction cost increases. Further, to maximize federal funding, additional state capital funding that can prudently be one-time in nature would be needed to reach the estimated need of \$265 million noted above.

The bottom line is that the fiscal landscape regarding transportation has changed, Maine is changing with it, and there is reason for optimism. If we set reasonable goals that fit Maine’s needs, manage costs with practical ingenuity, and find the funds needed to match available federal funds, all Maine people can realize the enhanced safety, economic opportunity, and quality of life that comes with a better transportation future.