

# The Economic Contribution and Impact of the Portland Museum of Art in Maine

*A snapshot from a typical year before the PMA Blueprint facilities expansion and estimates post-expansion*



*Photo from the PMA website*

Prepared for the Portland Museum Of Art

By the Maine Center for Business and Economic Research, University of Southern Maine

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PORTLAND MUSEUM of ART



MAINE CENTER FOR BUSINESS  
AND ECONOMIC RESEARCH

UNIVERSITY OF SOUTHERN MAINE



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# Executive Summary

With a renewed commitment to diversity, equity, accessibility, and inclusion the Portland Museum of Art's (PMA) vision to become a central community gathering place and serve as a regional economic catalyst is being realized through its \$100M multi-year redevelopment and construction project funded in part by an ongoing capital fundraising campaign. The following economic analysis – commissioned by the PMA and completed by the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) – quantifies the Museums ongoing contributions and impacts on the Maine economy in a typical year before the PMA Blueprint project (i.e., construction/expansion) and estimates the PMA's impact in a typical year after the expansion. Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data).

## Pre-Expansion Snapshot, the PMA's annual economic contribution in 2019

The two major components of the PMA's economic contribution stem from museum spending and visitor spending. In 2019, the PMA welcomed over 170,000 patrons, an estimated 13% of which were from out of state and their trip to Maine was motivated by visiting the museum. These tourists spent an estimated \$12.6 million directly on lodging, meals, shopping, transportation, etc. from outside of the museum. At the same time, the PMA paid \$8M to maintain its ongoing operations, 69% of the direct operating costs were spent in Maine. Direct spending by out-of-state tourists supported an additional \$8.1M in output (sales) – including both indirect and induced spending – and an additional 52 jobs. *For every \$100 of tourists spending (sales), an additional \$79 is generated elsewhere in the local economy.*

Including indirect and induced spending, the Museums direct operating activities supported an additional \$5.7M in output (sales), and 37 jobs. *For every \$100 of the PMA spending (sales), an additional \$99 is generated elsewhere in the local economy.* Combine, in a typical year before the expansion the PMA supported:

- **Over 300 jobs.** Museum & visitor spending supported 309 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.

- **\$12.9M labor income.** \$8.7 million in direct labor income which supported an additional \$4.2 million in indirect and induced impacts.
- **\$29.8M output (sales).** Generated a total of \$29.8 million in total output of which \$16M were from the initial direct spending which supported another \$13.8M in indirect and induced impacts.
- **\$1.9 million in local and state taxes.** In 2019, \$786,599 in local and \$1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of tourists.

## Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

The PMA Blueprint project is expected to be complete in 2027 and the new facilities open to the public. The PMA will have more space to host events, display more and higher quality exhibits, and in turn attract more visitors to the state. The increased capacity and diversity could allow the museum to welcome up to 300,000 annual visitors. An estimated 16% of visitors from out of state may take a trip to Maine motivated by visiting the PMA and could spend an estimated \$28M on direct tourism-related expenditures.

To support the additional capacity, the PMA's annual operating budget will nearly double from the pre-expansion snapshot and a greater portion will be spent in Maine (81%) to purchase goods and services from local businesses and pay museum employees. In total, the estimated contribution for 2027, the year *after* the expansion, includes:

# Executive Summary

## Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

- **Over 600 jobs.** Museum & visitor spending supported 621 jobs of which 426 were direct and another 195 were supported through indirect and induced spending.
- **\$28.1M labor income.** \$18.8 million in direct labor income which supported an additional \$9.3 million in indirect and induced impacts.
- **\$65.3M output (sales).** Generated a total of \$65.3 million in total output of which \$35M were from the initial direct spending which supported another \$30.2M in indirect and induced impacts.
- **\$4.2 million in local and state taxes in 2027.** In 2027, \$1.7 million in local and \$2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

## Five-Year Construction Impacts in the Maine Economy

This analysis also estimated the economic impact from the capital expenditures on the proposed PMA Blueprint construction project under two local spending scenarios. In 2023 through 2027, the PMA estimates that it will cumulatively spend \$52.1 million to construct the new 60,000 sq ft. building.

Under the first scenario, 50% of spending (i.e., \$26.1M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- \$17.4 million in associated labor income, and

- \$49.5 million in total output (sales)

Under the second scenario, 60% of spending (i.e., \$31.3M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- \$20.8 million in associated labor income, and
- \$59.4 million in total output (sales)

## Importance of cultural amenities, community, and museum membership

Housing inventory – via the conversion of property from non-residential use to housing – is expanding in Southern Maine and downtown Portland, increasing residents and the pool of potential museum members.

The PMA's presence in downtown Portland in addition to the Blueprint project and other redevelopment and revitalization efforts underway improve the areas desirability and contribute to increased economic activity and population growth within the Portland and Greater Portland area.

# Introduction & Methods

# Introduction

## Introduction & Methods

Situated near Congress Square in Portland Maine, the Portland Museum of Art (PMA) is part of the city's unique downtown Arts District that includes a mix of condos, apartment rentals, hotels, and local businesses. Not only does the PMA contribute to the local economy by generating sales and creating jobs, but it also contributes to the quality of life that Portland is known for as it serves the needs of residents, workers, and visitors, and invests money in redeveloping the area.

The PMA Blueprint is a \$100M multi-year redevelopment and construction project funded in part under an ongoing capital fundraising campaign. Some of these investments will improve the existing structure and surrounding property and approximately \$52M will be put towards the construction of a new 60,000 square foot building. By 2027, the PMA Blueprint project is expected to be complete, and the new facilities open to the public.

To quantify the Museums ongoing contributions and impacts resulting from its capital investments on new construction, the PMA commissioned the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) to conduct the following economic analysis.

The remaining section provides an overview of the economic trends shaping the region then describes estimation methods and data sources. The remaining report is structured into the following sections:

- 1) Pre-Expansion Snapshot (2019)
- 2) Post-Expansion Snapshot (2027)
- 3) Five-Year Construction Impacts in the Maine Economy
- 4) Technical Appendices

Map 1: The Portland Museum of Art located at 7 Congress Sq, Portland, ME



Image source: <https://www.portlandmaine.com/explore-downtown/downtown-map/>



# Overview – Economic and Demographic Trends

## Introduction & Methods

A general understanding of the underlying economic conditions and trends in a region provide important context when considering current and estimated impacts to the economy. Trends that impact consumer spending or influence a person's choice to visit or relocate to a city will have an impact on museum visitation and membership opportunities.

During the peak of the COVID-19 pandemic, stay at home orders and social distancing restrictions caused tourism-related spending to significantly drop. In 2020 and 2021, spending shifted from services to goods as travel, dining, and other indoor service activities halted. As of October 2022, expenditures on services have since increased to pre-pandemic levels. While this is good news, economic conditions in the short- and medium-term are highly uncertain, and there is an increased possibility of an economic slowdown in 2023.

Portland was listed as one of the [100 Best Places to Live in the US in 2022](#), based on a range of factors such as community amenities, education, sustainability, transportation, housing, and the economy. However, demographics and housing were among Portland's lowest ranking. Maine's aging demographic and resulting labor market conditions is a longstanding challenge, and the lack of housing stock and the high cost of existing housing is an ongoing concern.

Maine has the oldest population in the US by median age (44.7 years) and by percent of the population age 65+ (21.7%).<sup>1</sup> Over the next 10 years, the entire baby boomer cohort will surpass age 65 and reach retirement. It was typical for baby boomers to work beyond retirement age, but more have retired during the pandemic. At the same time there is a smaller population of youth and young adults in the state to replace them in the labor force and without higher rates of in-migration economic growth will be constrained. An older demographic will not negatively impact the number of people that visit the PMA, but labor force issues can impact both the museum and its local vendor and supplier business operations. These issues can also impact the supply of local construction workers available to build the PMA's the new structure.

Recent population growth in Maine is ranked among the fastest in the nation. From 2020 to 2021 Maine's population increased by nearly 10,000 or 0.7%, for comparison, the US as a whole added around 400,000 people, an increase of 0.1%. Much of this growth was driven by in-migration that was strong enough to offset a natural decrease in population (i.e., when deaths outnumber births). In other words, more people moved to Maine during the pandemic. This was driven in part by an increase in remote work and people seeking locations that allow for work-life balance and access to outdoor recreation. The influx of people relocating to Maine is not a new trend but has increased since the pandemic. These trends are encouraging especially since the state needs more working-age people to sustain economic activity, but it is uncertain whether they will continue at the same rate in the future. There is opportunity for Maine to see continued increased in-migration in the coming years due to the latter trends, however housing – in addition to childcare and school availability for those with children – are possibly limiting factors.<sup>2</sup>

Housing costs have sharply increased over the past several years as demand far outpaced supply. Affordability is a particular concern as interest rates have spiked causing more potential buyers to be priced out of the market and make home mortgages more expensive. Higher home prices have contributed to higher rental prices; increases in the Portland and Greater Portland area have started to create a new 'high end' market especially in cities such as Westbrook, Biddeford, Gorham, Windham, Brunswick, and Lewiston. This trend was underway prior to the pandemic but demand has increased, and many higher end options are being purchased.

The need for more housing in general and more affordable options is a well-known issue in Portland and the Greater Portland area. From 2011 to 2020 the total number of housing units in Cumberland County increased by 5.7% (7,861) and in the Art District neighborhood where the PMA is located the number of housing units increased by 7% (142), but it is still not enough to keep up with demand.<sup>3</sup> The influx of people relocating to the state further constrains the housing supply and limits availability for ongoing migration.

<sup>1</sup> 2021 Population Estimates Program

<sup>2</sup> Maine State Economist

<sup>3</sup> Housing data from 2011-2015 American Community Survey (ACS) 5-Year and 2016-2020 ACS 5-Year estimates.

# Overview – Downtown Redevelopment and Revitalization

## Introduction & Methods

Thriving and successful neighborhoods and downtowns provide a sense of place, a community. Cultivating community, as the PMA has done for over 140 years, impacts the economy as more people in the area results in improved business activity, increased property values, and expanded local tax base.

*Think of quality of life as everything that makes a place worth calling home.*

Within economic development, “quality of life” is measured with a complex balance of indicators such as infrastructure, jobs, education, healthcare, housing, and cultural amenities. A place, or a region with a high quality of life can provide its residents with everything they need and want to live and thrive. That is why improving quality of life increases desirability for a destination. It attracts and retains people, adds revenue, and boosts recognition and reputation.

Investments that contribute and improve quality of life and place can be more effective than traditional economic development tools such as business tax incentives to attract or retain employers or create a more “business-friendly” environment with lower taxes and labor costs. While traditional tools have value, community amenities such as recreational opportunities, cultural activities, and quality services may be larger contributors to a healthy local economy than traditional “business-friendly” measures.<sup>4</sup> Other quality of life factors such as good restaurants, access to open spaces and public spaces, good jobs, safety, and connection and mobility also attract (and retain) more people to an area to live, work, and play.

*Housing & real estate development trends in Portland and the Greater Portland area*

There are several housing developments and redevelopments currently under construction in Portland downtown, Bayside, and East Bayside neighborhoods in addition to revitalization projects. These projects will increase housing capacity and

contribute to the quality of life the city has become known for, as well as have a positive impact on museum’s membership opportunities.

Office building conversions in downtown Portland are bringing more housing inventory online as apartments, condos, and hotels. In 2021, at least two known buildings were sold in downtown Portland with plans to convert to residential, with two additional known for 2022, and more potential projects are under discussion.<sup>5</sup>

Housing-related redevelopment is underway in Portland to increase housing capacity, such as the updates to 50 Monument Square and the conversion of city’s iconic Time & Temperature building to an 86-bed luxury hotel with a restaurant and rooftop bar, and meeting and retail spaces.

These are just a few examples of redevelopment projects in addition to the PMA Blueprint project and other revitalization efforts underway contributing to the areas increased desirability thus improving economic activity and population growth within the Portland and Greater Portland area.

<sup>4</sup> Ohio River Valley Institute. (2022) [An Aggregate Approach to Estimating Quality of Life in Micropolitan Areas](#)

<sup>5</sup> MEREDA [2022 Forecast Conference](#). [Southern Maine Office Forecast](#), Nate Stevens, The Boulos Company



# Estimation Methods & Data Sources

## *Introduction & Methods*

The Portland Museum of Art (PMA) provided actual and projected annual operational data including payroll information and vendor/supplier spending, detailed visitation counts as well as portion of out-of-state visitors, and estimated construction spending for 2019 through to 2027. These data represent PMA's direct spending in the Maine economy and serve as inputs to estimate indirect and induced impacts statewide.

Data from the Maine Office of Tourism's (MOT) 2021 Economic Impact and Visitor Tracking Report and "Maine Museums: An Economic Impact Study, 2010" is used to develop trip assumptions, visitor segments, spending patterns, and estimate the portion of visitors that took a trip to Maine motivated by visiting the PMA. These data along with visitor counts provided by the PMA are used to estimate the total direct tourism-related expenditures (i.e., visitor purchases of goods and services including meals, hotels, transportation, etc. outside of the museum). Trip assumptions, visitor segments, and spending patterns for 2019 are used to estimate direct tourism-related expenditures for 2027. An estimated 25% of out-of-state museum visitors in 2019 took a trip to Maine motivated by visiting the PMA. In 2027, an estimated 35% of out-of-state museum visitors will take a trip to Maine motivated by visiting the PMA. These data reflect direct visitor spending and serve as inputs to estimate indirect, induced, and sometimes direct impacts (i.e., jobs and labor income) to the state.

The term "economic impact" and "economic contribution" are often used interchangeably but there are distinctions important for the reader to understand. The term "economic impact" of the PMA represents new spending in the economy, that is "but if not for" the PMA, the spending is assumed would not have occurred. On the other hand, "economic contribution" can be thought of as the entire footprint of the PMA to the Maine economy, it measures the support of the PMA's ongoing operations - that is money that is already circulating. The spending of tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event, and capital investments on new construction represent spending that would not have occurred but for the PMA.

Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data). IMPLAN is a regional economic

analysis software application that is designed to estimate the impact or "ripple" effect of a given economic activity within a specific geographic area. For more information on the IMPLAN modeling process, visit [IMPLAN.com](https://www.implan.com). The impacts and contributions presented in this report are quantified and presented using common economic metrics including full-time equivalent employment (FTEs), workers, wages, total output (sales), and tax revenues. Only spending that takes place within Maine is included as stimulating the changes in economic activity. All economic impact and contribution figures are reported in current 2022 dollars.

A note on employment. Jobs or workers in IMPLAN represent average annual employment. To switch between FTE and IMPLAN jobs we use the 2020 546 FTE & Employee Compensation Conversion table. The factors used to switch between FTE to IMPLAN jobs and from IMPLAN jobs to FTE are as follows: 1 FTE is equal to 1.159 IMPLAN employees and 1 IMPLAN employee is equal to 0.831 FTE. Refer to the technical appendices for modeling output definitions and other key terminology used throughout the report.

# Ongoing Museum Operations

## Introduction & Methods

Since the onset of the COVID-19 pandemic in 2020, the PMA closed for several months due to emergency restrictions – involving state and local stay-at-home mandates coupled with physical distancing measures – enacted to limit the spread of the virus. In April and May of 2020 and January and February of 2021, the PMA was closed to visitors. During this time, the pandemic caused consumer spending to significantly contract as most people opted to stay home instead of going out and spending money on leisure activities. In particular, services that involved any kind face-to-face human interaction were affected the most. In 2019, over 170,000 individuals visited the PMA. When compared to visitation in 2019, levels were 67% lower in 2020 and 46% lower in 2021. The impacts of COVID-19 have lingered into 2022 but visitation has increased. As of September 2022, the PMA has welcomed over 97,000 visitors exceeding totals from 2020 and 2021. The number of museum visitors is expected to increase as more people continue to resume pre-pandemic activities. By 2027, the PMA estimates the number of museum visitors will nearly double from 2019 levels because of the increased capacity and attraction anticipated from its new facilities (Figure 1).

The COVID-related closures did not lead to a drop in the PMA operating expenses, in fact these costs slightly increased in 2020 and 2021 over 2019 levels. During this time, the Museum still needed to maintain its facilities and art collections and pay its employees. Many businesses had to layoff employees, but the PMA was able to retain and support its staff during these challenging times. Actual and projected operating costs, shown in Figure 2, include total personnel budget (with tax and benefits) and vendor/supplier spending. In 2019, approximately 69% of the operating budget was spent in Maine on local vendor and supplier businesses and to pay workers' salaries, wages, and benefits. As the operating budget increases to support anticipated capacity so too will the PMA's share of local investments. By 2027, approximately 81% of the operating budget will be spent in Maine to purchase goods and services from local vendors/suppliers and pay employees.

Figure 1. Annual number of visitors (with future projections)

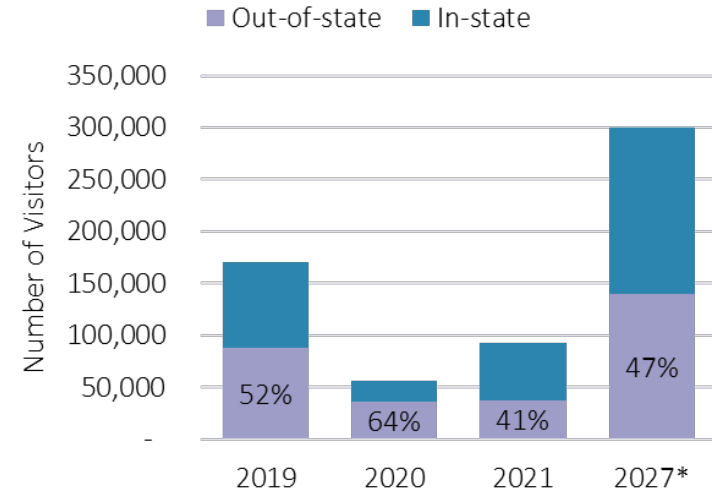
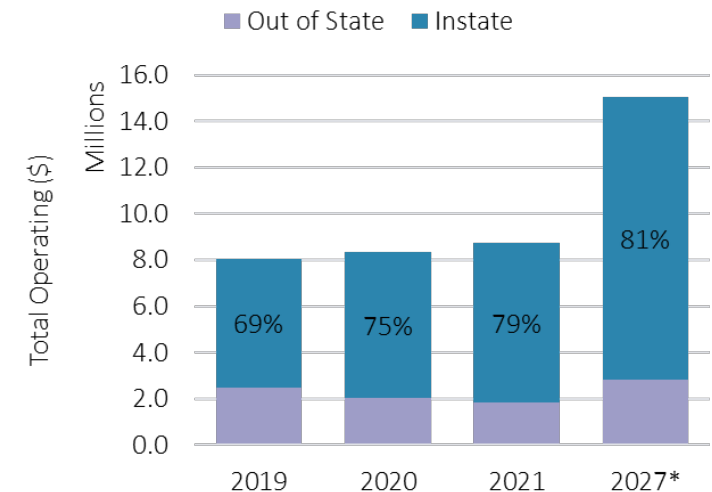


Figure 2. Annual operating costs (with future projections)



Note: Total operating cost includes personnel budget (with tax and benefits) and vendor/supplier spending.\*Projections.

# Visitor Estimates and Assumptions

## Introduction & Methods

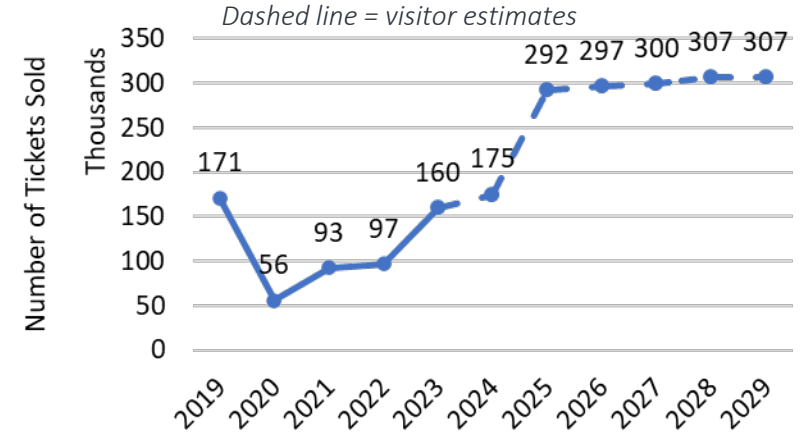
*Number of Visitors.* In 2019, the PMA welcomed over 170,000 visitors, 88,000 or 52% came from outside of Maine. Not all visitors came to Maine to specifically visit the PMA. An estimated 25% or 22,020 out-of-state visitors are estimated as museum-specific tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event (Table 1). By 2027, the PMA expects the facilities expansion to be complete and anticipates up to 300,000 annual visitors, 47% or 140,153 would come from out-of-state. Because the new facilities are expected to increase the museums physical capacity and draw new art attractions that in turn attract more visitors to the state, an estimated 35% of out-of-state visitors (i.e., 49,053) are estimated to be museum-specific tourists in 2027.

**Table 1. Museum Visitors**

	2019	2027
Total museum visitors	170,831	300,000
Tourists - trip to Maine motivated by visiting the PMA	22,020	49,053

*Visitor segments and trip assumptions.* Not all visitors have the same spending patterns, some come for the day while others, for example, stay with friends and family or at a hotel. To account for these differences, out-of-state museum visitors – or museum tourists – are segmented into three groups. Two are based on the type of overnight accommodations, that is paid lodging (45%) and unpaid lodging (27%), and the third is day-trippers (28%) (Table 2). The average trip length for paid lodging visitors is 4 nights and non-paid overnight visitors is 5.7 nights. Visitor segments and trip assumptions are applied to both 2019 and 2027 museum tourist counts.

**Figure 3. Annual Museum Visitor Totals & Estimates**



**Table 2. Visitor Segments & Trip Assumptions**

	Visitor Segments		
	Paid Overnight	Unpaid Overnight	Day
Average length of stay (nights)	4	5.7	0
Visitor segment (% of total)	45%	27%	28%

# Visitor Spending and Assumptions

## Introduction & Methods

*Spending Patterns.* Daily per person spending by visitor segment, shown in Table 3, is estimated from daily travel party spending figures reported by the MOT, and adjusted by findings from the Maine Museums report and the authors assumptions. Spending patterns in 2019 are comparable to those in 2021. Average travel party size, reported as 2.7, is used to convert daily travel party spending to daily per person spending. The average cost to purchase a ticket to the museum is assumed to be captured in the spending patterns shown in Table 3.

*Direct tourism-related expenditures* reflect visitor purchases of goods and services on meals, hotels, shopping, transportation, etc. from outside of the museum. To estimate the direct tourism-related spending of museum tourists, the average spending patterns by visitor segment, illustrated in Table 4, are multiplied by the number of visitors in each respective segment. Annual ticket sales estimated from these visitors of \$178,512 in 2019 and \$397,368 in 2027 are removed from total direct spending because this spending is technically captured within the museum effects. Since the number of out-of-state visitors is expected to increase from 88,078 in 2019 to 140,153 in 2027, a 59% increase, the assumption is that ticket sales will increase by approximately the same percentage.

**Table 3. Daily Per Person Spending Patterns**

Category	Visitor Segments		
	Paid Overnight	Unpaid Overnight	Day
Accommodations	\$106	\$0	\$0
Food & beverage	\$52	\$56	\$31
Recreation	\$11	\$13	\$7
Retail shopping	\$21	\$36	\$20
Transportation	\$31	\$17	\$9
<b>Total</b>	<b>\$221</b>	<b>\$121</b>	<b>\$67</b>

**Table 4. Direct Tourism Spending**

Category	2019	2027
Accommodations	\$4,188,202	\$9,330,144
Food & beverage	\$4,171,069	\$9,291,949
Recreation	\$551,314	\$1,228,475
Retail shopping	\$1,832,872	\$4,083,112
Transportation	\$1,838,789	\$4,096,300
<b>Total</b>	<b>\$12,582,246</b>	<b>\$28,029,981</b>

# The Portland Museum of Art's Economic Contribution & Impact in Maine

*Pre-Expansion Snapshot, 2019*

This section reports the PMA's statewide economic contribution in 2019, a typical year before construction. The two major components of the economic contribution and impact stem from museum spending and visitor spending. The PMA pays its employees and spends money at local vendor/supplier businesses to maintain its ongoing operations while people from out-of-state who come to Maine to visit the Museum spend money on retail goods, meals, hotels, and other items outside of the museum. This constitutes the initial or direct spending. The local businesses use a portion of their revenues to purchase supplies, equipment, and employ workers. Employees of the PMA and its vendors, in turn, spend their earnings in the local economy on household consumption goods including food, entertainment, housing and other goods and services adding value along the way. This results in recurring rounds of local economic spending, this is referred to as the indirect and induced economic impacts, which are estimated by a Maine economic model (IMPLAN) and presented in the following section.

# Museum Spending Effects in the Maine Economy

*Pre-Expansion Snapshot, 2019*

The PMA contributes to the Maine economy through three types of impacts: direct (initial sale or spending) and indirect and induced, which account for the ripple effects of multiple rounds of spending in the economy. These contributions are quantified and presented, in Table 5, using common economic metrics including workers/FTE, labor earnings, and total output.

In 2019, approximately 69% of the PMA's direct operating costs were spent in Maine on local vendor and supplier businesses (\$1,156,000) and to pay museum employees (\$4,379,035). These operating activities are estimated to support an additional 8 indirect workers, \$335,983 (in 2022 dollars) in indirect labor income, and \$1.4 million in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's ongoing operational spending, include an estimated 129 jobs (i.e., 107 FTE), \$6.3 million in associated labor income, and \$11.5 million in total output (sales).

**Table 5. Contribution of the Operation of PMA to the Maine Economy, 2019**

*in 2022 dollars*

<b>Impact</b>	<b>FTE</b>	<b>Labor Income</b>	<b>Output / Sales</b>	<b>Workers</b>
Direct	76	\$ 4,559,603	\$ 5,763,270	92
Indirect	7	\$ 335,983	\$ 1,408,376	8
Induced	24	\$ 1,369,320	\$ 4,291,359	29
<b>Total Impact</b>	<b>107</b>	<b>\$ 6,264,905</b>	<b>\$ 11,463,004</b>	<b>129</b>

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars. The multiplier is 1.99.

Assumptions: In 2019, 32% of total local vendors/suppliers spending (i.e., \$1,156,000) went to Maine businesses. This figure along with total employee compensation (\$4,379,035) and number of employees (92) are used to estimate indirect and induced spending.



# Visitor Spending Effects

## Pre-Expansion Snapshot, 2019

In 2019, an estimated 22,020 tourists took a trip to Maine motivated by visiting the PMA, these tourists spent an estimated \$12.6 million on lodging, meals, shopping, transportation, etc. from outside of the museum. This direct spending supports indirect and induced effects generated by sales to tourism-related businesses in the hospitality sectors that in turn purchase goods and services from other Maine businesses and pay their employees who then spend their wages on household goods and services in Maine. Indirect and induced activity support an additional 52 jobs, \$2.5 million (in 2022 dollars) in labor income, and \$8.1 million in output.

Including direct, indirect and induced spending, the total impacts of visitor spending, include an estimated 180 jobs (i.e., 150 FTE), \$6.3 million in associated labor income, and \$18.3 million in total output (Table 6).

**Table 6. Economic Impact of Visitor Spending to the Maine Economy, 2019**  
*in 2022 dollars*

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	106	\$ 4,095,696	\$ 10,192,076	128
Indirect	18	\$ 1,084,347	\$ 3,536,575	22
Induced	25	\$ 1,453,745	\$ 4,553,370	30
<b>Total Impact</b>	<b>150</b>	<b>\$ 6,633,789</b>	<b>\$ 18,282,021</b>	<b>180</b>

Note: Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars. Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. The multiplier is 1.79.

# The Economic Contribution & Impact of the PMA in Maine

## Pre-Expansion Snapshot, 2019

The total economic contribution of the PMA in 2019 is the sum of the business activity directly associated with operations of the PMA and the spending of tourists whose trip to Maine was motivated by visiting the PMA.

In 2019, museum and tourism spending supported:

- Over 300 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.
- \$8.7 million in direct labor income which supported an additional \$4.2 million in indirect and induced impacts.
- Generated a total of \$29.8 million in total output of which \$16M were from the initial direct spending which supported another \$13.8M in indirect and induced impacts.

**Table 7. Contribution of Museum & Visitor Spending, 2019**

*in 2022 dollars*

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	183	\$ 8,655,299	\$ 15,955,346	220
Indirect	25	\$ 1,420,330	\$ 4,944,950	30
Induced	49	\$ 2,823,065	\$ 8,844,728	59
<b>Total Impact</b>	<b>257</b>	<b>12,898,693</b>	<b>29,745,025</b>	<b>309</b>

Notes: Results include the impacts and contribution of visitor or museum spending.

# Tax Impacts

## Pre-Expansion Snapshot, 2019

The economic activity generated by the PMA's ongoing museum operations and by spending of visitors on retail goods, meals, hotels, and other taxable items support fiscal impacts in the form of tax revenues from income, sales, and other tax collections. These result from taxes on wages and salaries paid by the PMA and by tourism-related businesses, in addition to taxes on wages and salaries from the indirect and induced jobs. In 2019, these economic activities generated an estimated \$1.9 million in local and state tax revenue in the Maine economy (Table 8).

### **\$1.9 million in local and state taxes in 2019**

In 2019, \$786,599 in local and \$1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

**Table 8. Fiscal Contribution of Museum & Visitor Spending, 2019**

*in 2022 dollars*

<b>Impact</b>	<b>Local</b>	<b>State</b>	<b>Total</b>
Direct	\$ 422,580	\$ 626,876	\$ 1,049,456
Indirect	\$ 98,310	\$ 136,414	\$ 234,724
Induced	\$ 265,709	\$ 322,930	\$ 588,639
<b>Total Impact</b>	<b>\$ 786,599</b>	<b>\$ 1,086,219</b>	<b>\$ 1,872,819</b>

Notes:

Assumptions:

# Five-Year Construction Impacts in the Maine Economy

*The PMA Blueprint Project, 2023-2027*

In 2023 through 2027, the PMA estimates that it will cumulatively spend \$52.1 million on its new facilities expansion. This section reports the one-time economic impact from the PMA's capital expenditures on the proposed PMA Blueprint project in Maine under two local spending scenarios.

# Five-Year Construction Impacts in the Maine Economy – 50/50

*The PMA's Blueprint project, 2023-2027*

In 2023 through 2027, the PMA estimates that it will cumulatively spend \$52.1 million for (new) construction. Under the first scenario, 50% of spending (i.e., \$26.1M) is assumed to go to local construction companies, construction activities for this period are estimated to support 37 total direct construction-related jobs per year (i.e., 31 FTEs) and \$10 million (in 2022 dollars) in direct labor income.

Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- \$17.4 million in associated labor income
- \$49.5 million in total output (sales)

*For every \$100 of the PMA spends on new construction, an additional \$90 is generated elsewhere in the local economy.*

Labor income and output reported in Table 9 is the combination of the impacts across the five years, reported in 2022 dollars. The number of workers and FTEs is reported in terms of average annual jobs and FTEs (i.e., jobs/year and FTE/year) for the project. This is because the jobs on the construction site are not cumulative, in the same way that an employee working a job for 5 years is not viewed as 5 jobs.

**Table 9. Economic Impact from New Construction Spending, 5-year period (50/50 Scenario)**

*in 2022 dollars*

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
<b>Direct</b>	<b>31</b>	<b>\$ 9,998,223</b>	<b>\$ 26,059,000</b>	<b>37</b>
Indirect & Induced	24	\$ 7,351,350	\$ 23,477,917	29
<b>Total Impact</b>	<b>55</b>	<b>\$ 17,349,573</b>	<b>\$ 49,536,917</b>	<b>66</b>

Notes: The Portland Museum of Art (PMA) provided construction cost estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9.

# Five-Year Construction Impacts in the Maine Economy – 60/40

*The PMA's Blueprint project, 2023-2027*

Under the second scenario, 60% of spending (i.e., \$31.3M) is assumed to go to local construction companies, construction activities for this period are estimated to support 45 total direct construction-related jobs per year (i.e., 37 FTEs) and \$12 million (in 2022 dollars) in direct labor income. Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- \$20.8 million in associated labor income, and
- \$59.4 million in total output (sales)

Labor income and output reported in Table 10 is the combination of the impacts across the five years, reported in 2022 dollars.

**Table 10. Economic Impact from New Construction Spending, 5-year period (60/40 Scenario)**

*in 2022 dollars*

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
Direct	37	\$ 11,997,868	\$ 31,270,800	45
Indirect & Induced	28	\$ 8,821,620	\$ 28,173,500	34
<b>Total Impact</b>	<b>65</b>	<b>\$ 20,819,487</b>	<b>\$ 59,444,300</b>	<b>79</b>

Notes: The Portland Museum of Art (PMA) provided construction cost estimates and share of local spending estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9



# The Portland Museum of Art's Economic Contribution & Impact in Maine

*Post Expansion Snapshot, 2027*

By 2027, the multi-year redevelopment and construction project is expected to be complete, and the new facilities open to the public. The new facilities are anticipated to increase the PMA's physical capacity, it will have more space to host events, display more and higher quality exhibits and in turn attract more visitors. This section provides a snapshot of the PMA's economic contribution in 2027 as a result of the estimated increase in operational spending and increased visitor attraction and spending.

# Museum Spending Effects in the Maine Economy

*Post Expansion Snapshot, 2027*

Approximately 81% of the PMA's direct operating costs will be spent in Maine on local vendor and supplier businesses (\$2,600,000) and to pay museum employees (\$9,640,000), in 2027. These operating activities are estimated to support an additional 17 indirect jobs, \$713,871 (in 2022 dollars) in indirect labor income, and \$3.1 million (in 2022 dollars) in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's anticipated increase in operational spending, include an estimated 216 jobs (i.e., 180 FTE), \$13.3 million in associated labor income, and \$24.4 million in total output (sales).

**Table 11. Contribution of the Operation of PMA to the Maine Economy, 2027**  
*in 2022 dollars*

<b>Impact</b>	<b>FTE</b>	<b>Labor Income</b>	<b>Output / Sales</b>	<b>Workers</b>
Direct	115	\$ 9,640,000	\$ 12,240,000	138
Indirect	14	\$ 713,871	\$ 3,051,006	17
Induced	51	\$ 2,903,075	\$ 9,098,032	61
<b>Total Impact</b>	<b>180</b>	<b>\$ 13,256,946</b>	<b>\$ 24,389,038</b>	<b>216</b>

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars.

Assumptions: By 2027, the PMA estimates that 48% of total vendors/suppliers spending (i.e., \$2,600,000) will go to Maine businesses. This figure along with projected employee compensation (\$9,640,000) and number of employees (138) are used as model indirect and induced spending.

# Visitor Spending Effects

*Post Expansion Snapshot, 2027*

In 2027, an estimated 49,053 tourists will take a trip to Maine motivated by visiting the PMA. These visitors will spend an estimated \$28 million for lodging, meals, shopping, transportation, etc. from outside of the museum. Indirect and induced impacts are estimated to support an additional 117 jobs, \$5.7 million (in 2022 dollars) in labor income, and \$18.1 million in output.

Including direct, indirect, and induced spending, the total impacts of visitor spending, include an estimated 405 jobs (i.e., 336 FTE), \$14.9 million in associated labor income, and \$40.9 million in total output (sales).

**Table 12. Economic Impact of Visitor Spending to the Maine Economy, 2027**  
*in 2022 dollars*

<b>Impact</b>	<b>FTE</b>	<b>Labor Income</b>	<b>Output / Sales</b>	<b>Workers</b>
Direct	239	\$ 9,174,087	\$ 22,805,766	288
Indirect	40	\$ 2,421,710	\$ 7,898,630	48
Induced	57	\$ 3,254,228	\$ 10,192,750	68
<b>Total Impact</b>	<b>336</b>	<b>\$ 14,850,025</b>	<b>\$ 40,897,146</b>	<b>405</b>

Note: Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars.

# The Economic Contribution & Impact of the PMA in Maine

## Post Expansion Snapshot, 2027

The total economic contribution is the sum of the museum spending effects and visitor spending effects previously reported. In 2027, the estimated museum and tourism spending will support:

- Over 600 jobs of which 426 were direct impacts and another 195 were supported through indirect and induced spending.
- \$18.8 million in direct labor income which supported an additional \$9.3 million in indirect and induced impacts.
- Generated a total of \$65.3 million in total output of which \$35M were from the initial direct spending which supported another \$30.2M in indirect and induced impacts.

**Table 13. Estimated Contribution of Museum & Visitor Spending, 2027**  
*in 2022 dollars*

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	354	\$ 18,814,087	\$ 35,045,766	426
Indirect	55	\$ 3,135,581	\$ 10,949,636	66
Induced	107	\$ 6,157,303	\$ 19,290,782	129
<b>Total Impact</b>	<b>516</b>	<b>28,106,971</b>	<b>65,286,184</b>	<b>621</b>

Notes: Results include the impacts and contribution of visitor or museum spending.

# Tax Impacts

## *Pre and post expansion*

By 2027, the economic activity supported by the PMA's ongoing museum operations and by spending of museum tourists is estimated to generate \$4.2 million in local and state tax revenues (Table 14).

### **\$4.2 million in local and state taxes in 2027**

In 2027, \$1.7 million in local and \$2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

**Table 14. Fiscal Contribution of Museum & Visitor Spending, 2027**

*in 2022 dollars*

<b>Impact</b>	<b>Local</b>	<b>State</b>	<b>Total</b>
Direct	\$ 948,844	\$ 1,423,457	\$ 2,372,301
Indirect	\$ 218,499	\$ 325,349	\$ 543,848
Induced	\$ 579,512	\$ 747,096	\$ 1,326,607
<b>Total Impact</b>	<b>\$ 1,746,855</b>	<b>\$ 2,495,901</b>	<b>\$ 4,242,757</b>

Notes:

Assumptions:

# Technical Appendices



# Definitions of Modeling Outputs & Other Key Terms

## *Technical Appendices*

<b>Key word</b>	<b>Definition</b>
Direct effects	The expenditures or initial production changes associated with an industry or sector in the study area which are entered into the Input-Output analysis.
Economic contribution	Economic ‘contribution’ measures the support of an existing business, event or policy that is money that is already circulating, it is the gross change in economic activity associated with a business, event, or policy in an existing regional economy.
Economic impacts	Economic ‘impacts’ are to the local economy by exits or entry-related events, “but if not for”, is the net changes in new economic activity associated with an industry, event, or policy in an existing regional economy.
Employee compensation	Total payroll cost of an employee, inclusive of wages, salaries, payroll taxes, and benefits such as health insurance and retirement.
Employment	The number of full-time, part-time, and seasonal jobs associated with a specific industry.
Full-time equivalent employment (FTEs)	Full-time equivalent employment (FTEs) is the number of full-time equivalent jobs, defined as total hours worked divided by average annual hours worked in full-time jobs.
Indirect effects	The economic impact of local industries purchasing goods and services from other industries along supply chains.
Induced effects	The economic impact of household spending of labor income following deductions from taxes, savings, and income for commuting.
Labor income	The sum of employee compensation and proprietor income.
Multipilers	The measure of an industry’s connection to the economy of Maine in terms of purchases, payments of wages and taxes, and other transactions.
Output	The value in dollars of production within Maine. It equates to the total of sales and net inventory change.
Total effects	The sum of direct, indirect, and induced effects.
Workers	Employment or workers is the total number of full-time, part-time, and seasonal jobs

**END**