

Economic and Fiscal Impacts of the Vistra Morro Bay BESS Project

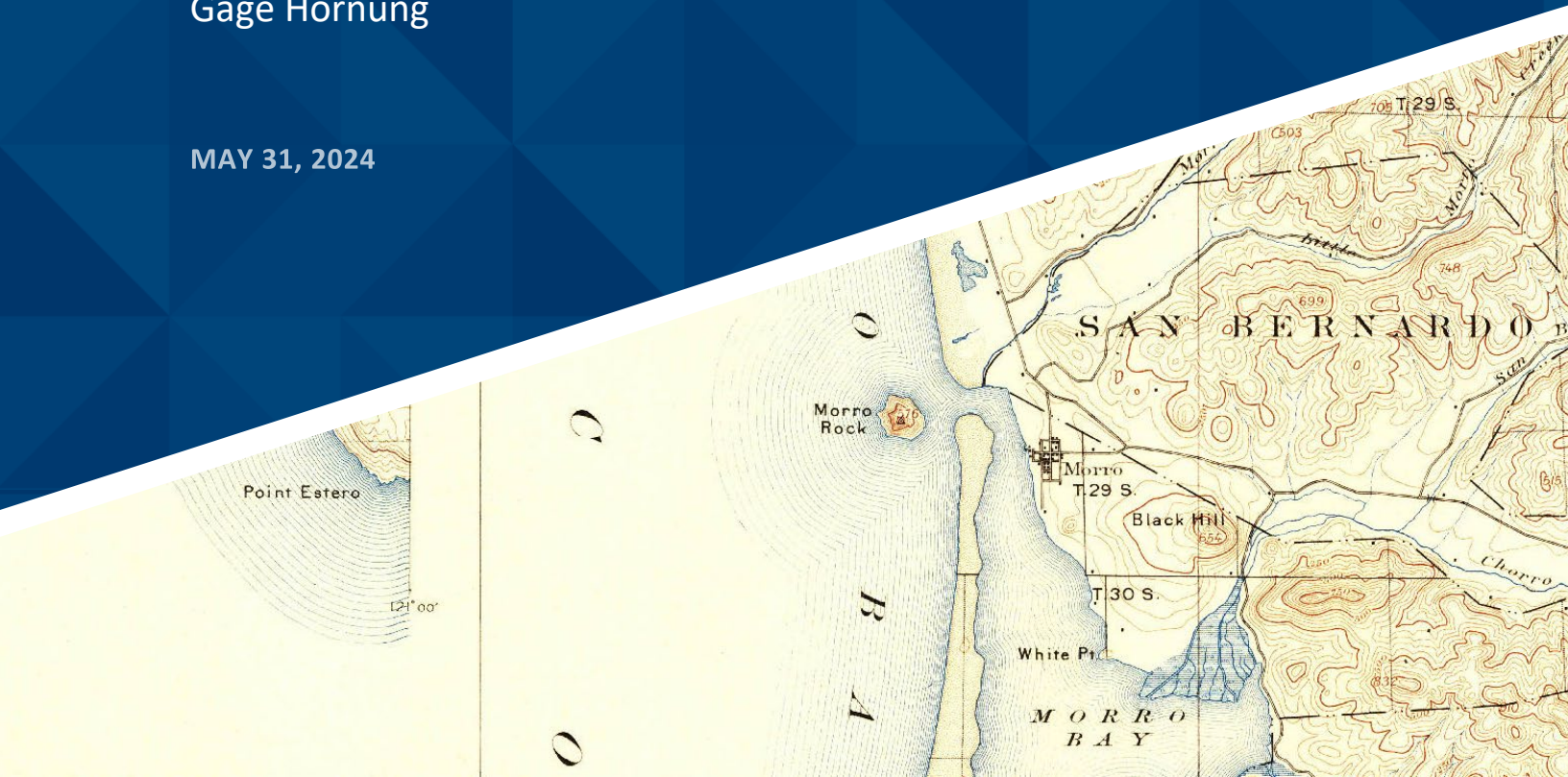
PREPARED BY

Mark Berkman
Charlie Gibbons
Gage Hornung

PREPARED FOR

Vistra

MAY 31, 2024



AUTHORS



Mark Berkman Mark.Berkman@affiliate.brattle.com

Dr. Mark P. Berkman is an expert in applied microeconomics. His experience spans the areas of: environment, energy, and natural resources; environmental health and safety; labor and employment; intellectual property; antitrust; commercial litigation and damages; and public finance. He has assisted both public and private clients and provided testimony before state and federal courts, arbitration panels, regulatory bodies, and legislatures.



Charles Gibbons Charlie.Gibbons@brattle.com

Dr. Charles Gibbons is a Principal with The Brattle Group and leader of its Environment & Natural Resources Practice. Dr. Gibbons specializes in applying sophisticated econometric and statistical models to legal, regulatory, and policy issues.



Gage Hornung Gage.Hornung@brattle.com

NOTICE

- This report was prepared for Morro Bay Power Company LLC (Vistra), in accordance with The Brattle Group’s engagement terms, and is intended to be read and used as a whole and not in parts.
- The report reflects the analyses and opinions of the authors and does not necessarily reflect those of The Brattle Group’s clients or other consultants.
- There are no third-party beneficiaries with respect to this report, and The Brattle Group does not accept any liability to any third-party in respect of the contents of this report or any actions taken or decisions made as a consequence of the information set forth herein.

© 2024 The Brattle Group

TABLE OF CONTENTS

Executive Summary.....1

I. Introduction and Summary of Findings.....4

II. **Vistra’s Proposed BESS Project**8

 A. The BESS 8

 B. Power Plant and Stack Demolition 9

 C. Potential Future Development..... 10

III. **Economic Impacts of the BESS Project**10

 A. Regional Economic Impacts..... 10

 B. Fiscal Benefits to the City 12

 1. Approach and Results..... 12

 2. Fiscal Benefits in the Context of the City Budget..... 16

IV. **Fiscal Benefits of Potential Future Development Projects**.....19

 A. Methodology 20

 B. City Benefits..... 22

V. **Conclusion**24

Appendix A: **Macroeconomic Modeling Using IMPLAN**.....1

 Construction of the BESS 1

 Demolition of the Power Plant 2

 IMPLAN Results..... 2

Appendix B: **Fiscal Benefits from Potential Future Development**.....3

 A. Property Tax Revenues..... 3

 B. Sales Tax Revenues..... 7

 C. Transient Occupancy Tax Revenues 9

Appendix C: **References**10

Executive Summary

Vistra has proposed building and operating a battery energy storage system (BESS) on portions of a 107-acre parcel of land in Morro Bay, California that was previously used by the decommissioned Morro Bay Power Plant (Power Plant Property). Vistra’s proposal calls for the construction of a 600 megawatt (MW) BESS on about 24 acres of the Power Plant Property (BESS Site). Vistra also plans to demolish the Power Plant building and stacks sited on approximately 19 acres of the Power Plant Property (Demolition Site). The proposed construction of the BESS and demolition of the Power Plant building and stacks are collectively referred to as the “BESS Project.”

Vistra retained The Brattle Group (Brattle), an economics and financial consulting to firm, to study the economic impacts associated with the BESS Project. These include regional economic impacts of the BESS Project, tax revenue benefits to the City of Morro Bay (the City) from the BESS Project, and tax revenue benefits to the City from potential future development on other portions of the Power Plant Property. Brattle has employed standard economic methods to prepare a preliminary, conservative, and illustrative assessment of these expected benefits.

In total, Brattle estimates that the BESS Project would result in a one-time payment of \$11.4 million in tax revenues to the City related to construction plus \$12.8 million in additional tax revenues to the City over the first ten years after completion of the BESS Project. Potential development on the Power Plant Property following completion of the BESS Project could result in additional annual tax revenue to the City of up to \$1.7 million. Table 1 below summarizes the expected impacts associated with the BESS Project.

TABLE 1: IMPACTS OF THE BESS PROJECT

Economic Impacts to San Luis Obispo County		
Job-Years Supported	[1]	2,482 Job-Years
Labor Income Supported	[2]	\$187.3 million
Regional Gross Domestic Product (GDP) supported	[3]	\$275.3 million
City Fiscal Benefits		
BESS Construction		
Sales and Use Tax Revenues from Batteries	[4]	\$8.8 million
Sales and Use Tax Revenues from Other Materials & Equipment	[5]	\$2.6 million
Total One-time Tax Revenues	[6]	\$11.4 million
Post Construction and Post-Demolition		
Additional Property Tax Revenues from Demolition (10 years)	[7]	\$0.4 million
Additional Property Tax Revenues from BESS (10 years)	[8]	\$12.3 million
Total 10-Year Tax Revenues	[9]	\$12.8 million

Sources and Notes

[1]-[3]: Table 3. See Section III.A for methodology.

[4],[5],[7],[8]: Table 4. See Section III.B.1 for methodology.

[6] = [4] + [5].

[9] = [7] + [8].

This report shows that the BESS Project would generate substantial tax revenues that would materially impact the City’s Budget. In addition to the one-time payment of approximately \$11.4 million, the City would receive approximately \$1.3 million in additional tax revenues per year over the first ten years of the BESS Project. This amount could fund more than half the current annual budgets of the Harbor Department (\$2,187,370) and Community Development Department (\$2,094,733), or approximately 32% or 23% of the City’s Fire Department or City’s Police Department current budgets, respectively.¹ These benefits are more than double the amounts currently collected pursuant to the City’s Cannabis Tax (\$490,000) or from Licenses and Permits (\$577,545).² In addition, the one-time sales and use tax payments from the BESS Project (\$11.4 million) could almost entirely fund the 3 largest capital projects proposed by the City (total

¹ City of Morro Bay, “Operating and Capital Budget,” Adopted June 13, 2023, page 81 (“City Budget”). Available at: <https://www.morrobayca.gov/DocumentCenter/View/17850/FY-2023-24-Adopted-Budget-PDF>.

² City Budget, page 77.

of approximately \$12.3 million) and cover more than half the total proposed expenditure for capital projects (\$19.5 million).³

We note that the estimates of tax benefits to the City provided in this report are conservative for four principal reasons.⁴ First, the estimates do not include certain tax revenues that would be collected as a result of direct economic activity related to the construction of the BESS or potential future development. Second, they do not consider certain tax revenues that may arise from the operations of the BESS. Third, they do not capture any “multiplier” effects on City revenues stemming from increased economic activity during construction or operation of potential future uses (e.g., workers spending their income at local restaurants or new public amenities leading to increased commercial activity on the Embarcadero). Lastly, the property tax revenue estimates assume that increases in property values will only equal the cost of the improvements. This methodology underestimates changes in property values and resulting changes in property tax revenues, as these improvements are expected to facilitate profitable business activities that would increase property values beyond the costs of the improvements alone.

Our estimates of economic impacts are also limited in that they focus solely on the construction of the BESS Project and not potential future development activity (which is currently speculative) or the operations of the BESS or potential future development.

³ City Budget, pages 46, 131, 181.

⁴ Note that Brattle has not considered any costs that would be incurred by the City in connection with the construction, demolition, or redevelopment activities, such as increased use of public services. Such costs will depend on a variety of factors that are difficult to forecast at this time, such as the City’s decisions to impose fees or assessments on future projects and decisions regarding appropriate infrastructure and maintenance activities.

I. Introduction and Summary of Findings

Vistra’s proposed BESS Project includes two components: construction and operation of a BESS on approximately 24 acres of the 107-acre Power Plant Property (BESS Site) and demolition of the existing Power Plant building and stacks on 19 acres of the Power Plant Property (Demolition Site). We have been retained by Vistra to study the expected economic impacts that are attributable to the BESS Project, including additional tax revenues to the City of Morro Bay (City). Vistra also asked that we perform a preliminary analysis of additional tax revenues to the City from potential development on other areas of the Power Plant Property. This report is intended to inform the City and the local community of important fiscal impacts that may be realized from the BESS Project as well as from potential development efforts facilitated by the BESS Project.

We find that the BESS Project would support economic activity in San Luis Obispo County, including more than 2,482 jobs and \$187 million in labor wages during the construction and demolition phases. In addition, economic activity associated with BESS construction is expected to amount to \$275 million.

We also find the BESS Project will result in significant fiscal benefits to the City. First, the BESS Project would result in at least \$11.4 million in sales and use tax revenues to the City during construction of the BESS, including more than \$8.8 million in tax revenues associated with Vistra’s purchase of batteries.⁵ In addition, we find that in its first decade post-completion, the BESS will provide \$12.3 million dollars in additional property tax revenue to the City.⁶ Similarly, the Demolition Site will provide \$0.4 million in additional property tax revenue to the City in the first ten years following demolition of the Power Plant building and stacks.

Table 2 below summarizes the expected impacts associated with the BESS Project.

⁵ As discussed in Section III, we conservatively assume the City would only collect 1.5% local sales and use taxes under the City’s Municipal Code. However, as explained in Section 1.B below, there may also be an opportunity for the City to collect additional tax revenues through the California statewide sales tax.

⁶ Throughout our report, our calculations assume constant property and sales tax rates over the time horizons considered and do not consider future inflation (put differently, estimates are denominated in 2024 dollars).

TABLE 2: IMPACTS OF THE BESS PROJECT

Economic Impacts to San Luis Obispo County		
Job-Years Supported	[1]	2,482 Job-Years
Labor Income Supported	[2]	\$187.3 million
Regional Gross Domestic Product (GDP) supported	[3]	\$275.3 million
City Fiscal Benefits		
BESS Construction		
Sales and Use Tax Revenues from Batteries	[4]	\$8.8 million
Sales and Use Tax Revenues from Other Materials & Equipment	[5]	\$2.6 million
Total One-time Tax Revenues	[6]	\$11.4 million
Post Construction and Post-Demolition		
Additional Property Tax Revenues from Demolition (10 years)	[7]	\$0.4 million
Additional Property Tax Revenues from BESS (10 years)	[8]	\$12.3 million
Total 10-Year Tax Revenues	[9]	\$12.8 million

Sources and Notes

[1]-[3]: Table 3. See Section III.A for methodology.

[4],[5],[7],[8]: Table 4. See Section III.B.1 for methodology.

[6] = [4] + [5].

[9] = [7] + [8].

These impacts do not consider the property, sales, or other tax revenues associated with potential development on the Demolition Site or other areas of the Power Plant Property. This report also does not evaluate several other fiscal benefits the City would enjoy as a result of the BESS Project, such as additional sales or use tax revenues during operation of the BESS. Last, our analysis does not evaluate other significant economic impacts associated with future operation of the BESS, such as increased economic activity facilitated by the BESS’s storage and dispatch of electricity to grid customers or local spending in connection with BESS operations and maintenance.

Completion of the BESS Project, particularly demolition of the Power Plant building and stacks, could also pave the way for development on other areas of the Power Plant Property, including the Demolition Site. We show these areas separately from the BESS Site in Figure 1. These future development efforts could also generate substantial sales and property tax revenues for the City. We evaluate the magnitude of these fiscal benefits to the City by considering different uses that could be accommodated through future development efforts. Specifically, we consider six uses identified by the City and the local community as potentially appropriate for the Power Plant

Property: retail, parking, parks/open space, hotel, residential, and mixed retail/residential spaces. As explained in Section VI, hotel uses generate the greatest fiscal benefits to the City on a per-acre basis, while park/open space uses generate the least fiscal benefits.⁷

FIGURE 1: MAP OF POTENTIAL FUTURE DEVELOPMENT AREAS ON THE MORRO BAY POWER PLANT PROPERTY



This analysis is provided for informational purposes only for the City and other stakeholders. The type and scale of future uses on other areas of the Power Plant Property will be considered in the forthcoming Master Plan and any development proposal would require approval from the

⁷ We note that parks/open space uses would generate non-economic benefits (e.g., aesthetic benefits) and economic impacts (e.g., increased tourism and associated patronage of local businesses) that are beyond the scope of this report.

City and other permitting agencies.⁸ Future development of certain uses may also be limited by various factors that are difficult to forecast.⁹

The estimates provided in this report are conservative for four principal reasons: (i) they do not include all tax revenues associated with construction or demolition activities for the BESS Project or potential future development on other areas of the Power Plant Property;¹⁰ (ii) they do not include certain taxes on the operations of the BESS; (iii) they do not consider induced benefits to the City from the BESS Project or potential future development activities;¹¹ and (iv) property value increases are assumed to equal only the costs of improvements, which underestimates the likely increases in values and the associated property tax payments.¹² These estimates also do not include costs the City may find necessary to establish and maintain uses that may be developed in the future, such as the costs of installing infrastructure (e.g., pedestrian paths), providing public services, or performing ongoing maintenance of public spaces.¹³

The remainder of this report is organized as follows. Section II describes the Power Plant Property, including the BESS Site, Demolition Site, and other areas of the property, and the proposed development activities associated with the BESS Project. Section III discusses the economic impacts of the BESS Project, including broader regional benefits as well as select tax revenue

⁸ This analysis should not be viewed as an endorsement of any specific development proposal or development of any particular use on the Power Plant Property.

⁹ As an example, we understand the Power Plant Property is currently subject to a deed restriction imposed by Pacific Gas & Electric Company (PG&E) that prohibits developing certain new uses on the Power Plant Property, including residential, hotel, or recreational (park/open space) uses. In addition, the City may later determine that certain uses are incompatible with existing, former, or nearby uses and should not be approved.

¹⁰ These include certain direct and indirect (secondary) benefits. Direct benefits would be local spending itself, while indirect (secondary) benefits relate to spending underlying the initial outlay. For example, suppose that the construction company caters lunch for its workers. The direct benefit would be the income earned by the owners and employees of the catering company. The indirect benefit would be income arising to the bakery that sold bread to the catering company, which used that bread in its catered lunches. Induced benefits capture spending by the employees of the catering company or bakery arising from (or “induced” by) the income generated by the construction catering contract.

¹¹ Induced or “multiplier” effects include benefits from economic activity that will flow from the principal activity studied. Here, multiplier effects could include additional revenues received from vendors and contractors in connection with construction on the BESS Project.

¹² This underestimates changes in property values and resulting changes in property tax revenues, as these improvements are expected to facilitate profitable business activities that would increase property values beyond the costs of the improvements alone.

¹³ As previously noted, these costs are difficult to forecast and will depend on various future decisions by the City, such as the City’s decision to impose fees to offset these costs. The City may also allocate some of these costs to future developers.

benefits to the City. Section IV discusses the potential future development types that we evaluate, the methodology used to evaluate the impacts of such development, and the resulting fiscal benefits to the City. Lastly, Section VI summarizes our findings.

Attached to this report are appendices providing additional information to support the provided calculations and figures. Appendix A contains additional information regarding the modeling of regional benefits. Appendix B provides additional information regarding our evaluation of benefits from potential future development on the Power Plant Property. Appendix C identifies the materials and sources that we referenced or relied on in preparing this report.

II. Vistra's Proposed BESS Project

In this section, we provide an overview of the proposed BESS, the demolition of the Power Plant building and stacks, and areas of the Power Plant Property that could be available for potential redevelopment.

A. The BESS

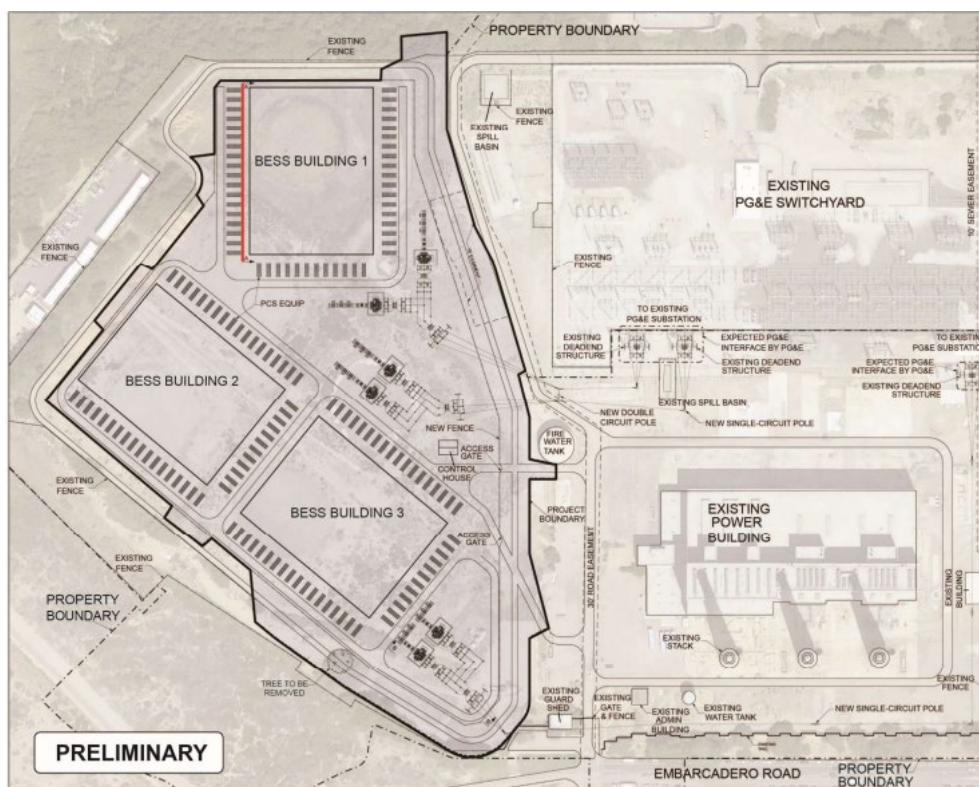
Vistra proposes to construct a 600 MW BESS on approximately 24 acres of the 107-acre Power Plant Property (BESS Site in Figure 1). The BESS would be constructed on those portions of the Power Plant Property that previously contained a tank farm serving the Morro Bay Power Plant and that regulatory agencies have identified as unfit for most non-industrial uses.¹⁴ The BESS would include three approximately 30-foot tall buildings of 91,000 square feet each. We understand that construction is expected to cost in excess of \$900 million, including approximately \$585 million to purchase the batteries themselves. Construction would occur over a three- to four-year period and employ an average of 100 to 300 workers at any time.¹⁵ Operation of the BESS is anticipated to require 6-8 full-time employees at an average payroll cost of \$92,630.¹⁶ Figure 2 shows the proposed site plan for the BESS.

¹⁴ Vistra, Corp., "Morro Bay Energy Storage Project," February 2021. Available at: <https://www.morrobayca.gov/DocumentCenter/View/15093/Vistra---Morro-Bay---Battery-Project-Presentation-022021> at slide 20.

¹⁵ Vistra, Corp., "Morro Bay Energy Storage Project," February 2021. Available at: <https://www.morrobayca.gov/DocumentCenter/View/15093/Vistra---Morro-Bay---Battery-Project-Presentation-022021> at slide 8.

¹⁶ Information provided by Vistra on April 10, 2024.

FIGURE 2: BESS SITE PLAN



Sources and Notes

NOP/Environmental Impact Report Project Description of 600-MW Morro Bay Battery Energy Storage System Project. Available at: <https://www.morrobayca.gov/DocumentCenter/View/16703/Morro-Bay-BESS-NOP>.

B. Power Plant and Stack Demolition

The proposed BESS Project also calls for the demolition of the Power Plant building and stacks within an approximately 19-acre portion of the Power Plant Property (Area 7 in Figure 6). According to a 2017 study by the US Department of Energy (DOE), costs to decommission a natural gas plant average \$18,653 per megawatt, though costs can reach as high as \$73,744 per megawatt (both in December 2023 dollars).¹⁷ Given the Power Plant’s capacity of 1,053 MW, this implies a cost between \$19.6 million ($\$18,653 \times 1,053 \text{ MW}$) and \$77.6 million ($\$73,744 \times 1,053 \text{ MW}$). However, costs of demolition necessarily vary according to local market and regulatory conditions. In addition, costs are typically higher when a site is intended to be restored to conditions suitable for residential and commercial development, as opposed to conditions that

¹⁷ Daniel Raimi, “Decommissioning US Power Plants: Decisions, Costs, and Key Issues.” Resources for the Future: Washington, DC, October 2017. Available at: <https://media.rff.org/documents/RFF20Rpt20Decommissioning20Power20Plants.pdf>.

would generally only be suitable for industrial uses. Because of the high redevelopment value of this site, demolition costs for this project are likely to be greater than the average.

Vistra currently estimates that remediation (i.e., removing hazardous materials and equipment) and demolition of the Power Plant building and stacks will cost approximately \$30 million. This is within the range identified in the 2017 DOE study. Accordingly, we rely on the \$30 million figure to estimate fiscal benefits from demolition.

C. Potential Future Development

Except for the BESS Project, no development is currently proposed on the Power Plant Property. However, Vistra anticipates that demolition of the Power Plant building and stacks could facilitate development on other areas of the Power Plant Property, including the Demolition Site. These areas range in size from 0.4 acres to 19 acres and currently accommodate various uses, including vacant land, parking and storage, and parks (see Figure 6). We evaluate the fiscal benefits associated with potential redevelopment activities on these areas, as described in Section IV.

III. Economic Impacts of the BESS Project

In this section, we discuss the economic impacts associated with the proposed BESS Project. These economic impacts occur throughout the life of the project, from initial construction of the BESS, through BESS operations and subsequent demolition activities. We begin with a brief description of the different types of economic impacts associated with development projects like the BESS Project, followed by a summary of the BESS Project's regional economic impacts. Last, the report details the main benefits the City will receive from the BESS Project, including additional property tax and sales and use tax revenues.

A. Regional Economic Impacts

A project's total economic impacts are the sum of direct, indirect and induced impacts. *Direct* impacts reflect the local spending itself, including local payroll and supply expenditures. *Indirect* (secondary) impacts constitute additional spending by businesses that support the direct expenditures. The boundary between direct and indirect costs can be vague and a reliable methodology must ensure that spending is not double counted. *Induced* benefits arise from earnings generated by the direct and indirect economic activity and spending on local goods and

services, for example when workers at the facility purchase goods and services from others in the community.

We rely on IMPLAN, a widely-used commercial macroeconomic model, to estimate the direct, indirect, and induced regional economic impacts within San Luis Obispo County from the BESS Project’s construction and demolition activities. The project costs are first allocated to sectors of the economy based on studies by the National Renewable Energy Laboratory. These cost allocations serve as inputs to the model. This model then accounts for spending on labor, goods and services, and energy flow through the economy according to the input industries. The output of this model includes the number of job-years supported and the level of economic activity (akin to gross domestic product).¹⁸ Because the IMPLAN model is designed to capture economic benefits across a region (or larger geographic area), IMPLAN is less useful for estimating the economic impacts that flow directly to the City. Instead, we consider the impacts to San Luis Obispo County. Appendix A includes additional information on the inputs and outputs of the IMPLAN model.

According to IMPLAN, the BESS Project is expected to support 2,290 jobs over the BESS construction period, including \$174 million of labor income. The economic activity associated with BESS construction is expected to be \$252 million. Additional impacts arise from the proposed demolition of the Power Plant building and stacks. Here IMPLAN indicates that these demolition activities would support 192 jobs, resulting in labor income of approximately \$14 million. Demolition is expected to include \$23 million in regional economic activity. Table 3 below summarizes the regional employment, labor wage, and economic activity values that would be supported by the construction and demolition activities associated with the BESS Project.

TABLE 3: REGIONAL ECONOMIC BENEFITS

		Jobs Supported (Job-Years)	Labor Income Supported	Economic Activity Supported
Construction	[1]	2,290	\$173.7 million	\$252.1 million
Demolition	[2]	192	\$13.6 million	\$23.2 million
Total	[3]	2,482	\$187.3 million	\$275.3 million

Sources and Notes

See Appendix A for IMPLAN Inputs and methodology.

¹⁸ Our analysis does not include any benefits resulting from the value of the energy stored and dispatched by the project.

The impacts presented in Table 3 focus on those arising from the construction and demolition phases of the BESS Project. The operational phase of the BESS Project would also yield economic impacts, including those facilitated by the BESS operations (i.e., storage and dispatch of electricity).¹⁹ The values in Table 3 do not include these impacts and therefore are conservative estimates of the BESS Project’s regional impacts.

B. Fiscal Benefits to the City

In addition to its share of the regional impacts of the BESS Project, the City would receive fiscal benefits from the project. In this report, we primarily focus on increased sales and use tax revenues paid during the construction of the BESS and increased property tax revenues collected annually by the City upon completion of the construction and demolition activities. These tax revenue benefits are commonly referred to as “fiscal benefits.” We discuss the methodology that we use to calculate these benefits and contextualize them within the City Budget below.

1. Approach and Results

To evaluate the fiscal impacts to the City, we primarily use a cash flow methodology. This approach uses the expected costs of improvements to calculate the expected additional property tax, sales tax, and use tax revenues to the City resulting from the BESS Project.

Sales and Use Taxes. Vistra anticipates that construction of the BESS will cost in excess of \$900 million.²⁰ The majority of those construction costs are related to the purchase of various construction materials necessary for the BESS. Vistra estimates that the cost of the batteries alone will be approximately \$586 million. Vistra also anticipates spending an additional \$176 million on other materials and equipment, for a total of approximately \$761.3 million on equipment and materials.²¹

¹⁹ Using IMPLAN to calculate the impacts from operation of the BESS requires a detailed understanding of expected operational expenses. Because operational costs may change depending on approvals issued by the City and other agencies, which have not yet been issued, we are not able to consider these impacts.

²⁰ Estimates provided by Vistra on April 18, 2024.

²¹ Vistra also anticipates significant physical labor costs, design and engineering costs, and various “soft costs” such as insurance costs. Calculating the fiscal benefits to the City from these costs requires making certain assumptions that are difficult to forecast at present. These benefits are therefore excluded from this report.

We understand that the City could assess sales or use taxes on all equipment and materials that Vistra purchases or uses within the jurisdiction of the City, including the materials discussed above.²² The City currently imposes a 1.5% sales and use tax.²³ We estimate that Vistra's purchase of the batteries would result in \$8.8 million of additional sales or use tax revenues for the City. In addition, the estimated \$176 million of non-battery construction materials and equipment would result in \$2.6 million of sales or use tax revenues for the City. In total, construction of the BESS alone would result in approximately \$11.4 million in additional City sales and use tax revenues.

However, the City may also receive additional sales and use tax revenues associated with the statewide sales and use tax. For example, one percentage point of the statewide sales and use tax would typically be directed to the County of San Luis Obispo (County).²⁴ We understand that there may be opportunities for the City to collect this additional 1% sales and use tax instead of the County. This could result in additional City tax revenues of approximately \$7.6 million. However, because this would be contingent on voluntary actions by Vistra or agreements between the City and County, we conservatively exclude any such revenues from our analysis.

We understand that California law provides a partial exemption for sales and use taxes associated with, among other things, equipment primarily used for the production, storage, and distribution of electric power.²⁵ However, that exemption only applies to the portion of the sales and use tax that would be collected by and directed to the State, and the law caps qualifying purchases at \$200 million per year.²⁶ Therefore, we understand that this law would not affect the tax revenues that would or could be collected by the City and County.

²² We understand that, if Vistra purchases the batteries from outside of the United States, neither the seller nor Vistra would pay sales tax in the United States. Instead, Vistra would pay use tax based on the location where the batteries would be used. (California Revenue & Taxation Code § 6201.) Sales and use taxes are applied at the same rates. (See California Department of Tax and Fee Administration, "Effective Sales and Use Tax Rates." Available at: <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=SalesTaxRates>.)

²³ Total sales and use taxes total 8.75%, which includes a statewide sales and use tax rate is 7.25% and a City sales and use tax of 1.5%, as codified in City of Morro Bay, Municipal Code, November 2022, Chapter 3.26.050. Available at: https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodeld=TIT3REFI_CH3.26TRUSTA, The County of San Luis Obispo does not charge a sales or use tax. (See California Department of Tax and Fee Administration, "Effective Sales and Use Tax Rates." Available at: <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=SalesTaxRates>.)

²⁴ See California Revenue & Taxation Code § 7203.1(a)(1).

²⁵ AB 1817 (2018), codified in California Revenue & Taxation Code § 6377.1.

²⁶ See 18 California Code of Regulations § 1524.5(a).

Property Taxes. The BESS Project would also result in fiscal benefits to the City following completion of construction and demolition activities. This is because the project would increase the value of both the BESS Site and the Demolition Site, and therefore the annual property taxes assessed on the Power Plant Property. For property in Morro Bay, annual property taxes are assessed at a rate of 1% of the property's assessed value, with the City receiving approximately 13.7 cents per dollar paid (that is, 0.137% of the assessed value annually).²⁷

Our cash flow methodology conservatively assumes that the increase in property value is equal to the costs of improvements on the BESS Site and Demolition Site. Vistra currently estimates total construction costs for the BESS Project to be approximately \$901 million. Based on the applicable annual property tax rate of one percent (1%), construction of the BESS would result in approximately \$9 million of additional property taxes paid to the County every year. The City would collect 13.7% of those increased property taxes, for a total of \$1.23 million annually, or a total of \$12.3 million over the first 10 years following construction of the BESS. Because this method assumes that the value of the improved property increases only by the costs of the improvements, it provides a conservative estimate of expected property tax revenue increases.²⁸

We also understand that the City would receive additional tax revenues under the Vehicle License Fee (VLF) adjustment program (sometimes referred to as the VLF Swap or the VLF Backfill Property Tax).²⁹ We conservatively estimate that, after construction of the BESS, the City would likely receive approximately \$258,000 in additional VLF revenues per year.³⁰ However, the actual benefits received by the City will depend on the value of all assessed property within the City at the time the BESS is constructed. Because that value is difficult to forecast at this time, we do not include this potential benefit in the remainder of this report.

For the Demolition Site, the estimated cost of demolition is \$30 million. Multiplying this cost by the portion of annual property taxes collected by the City (0.137%), we estimate that the City would collect \$41,000 in additional property taxes annually, or \$410,000 over the first ten years

²⁷ Property tax is levied by the San Luis Obispo County Assessor's Office at 1% of a property's assessed value, of which the City receives approximately 13.7 cents per dollar paid on property located within the municipal limits of Morro Bay. City of Morro Bay, "City of Morro Bay Midyear Budget Report FY 2022-23," February 2023. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final>.

²⁸ As noted, this result is conservative because development projects typically enable profitable business activities that increase a property's value in excess of the costs of development.

²⁹ California Revenue & Taxation Code § 97.70(c)(i)(C).

³⁰ San Luis Obispo County Assessor, 2023 Annual Report. Available at: <https://www.slocounty.ca.gov/Departments/Assessor/Forms-Documents/Annual-Reports/2023-Assessor-Annual-Report.pdf>.

following demolition. This calculation captures the increased value of the land following demolition and does not consider any benefits associated with potential future development on the Demolition Site.

In total, we estimate that the proposed BESS Project would result in fiscal benefits to the City of approximately \$11.4 million in one-time sales or use tax revenues from Vistra’s purchase of necessary construction materials, including the batteries, plus \$12.4 million in additional property tax revenues over the first 10 years of operation. Table 4 summarizes these fiscal benefits.

TABLE 4: CITY TAX BENEFITS FROM THE BESS PROJECT

Tax		Benefit
Sales and Use Taxes		
Sales and Use Tax Revenues from Batteries	[1]	\$8.8 million
Sales and Use Tax Revenues from Other	[2]	\$2.6 million
Materials & Equipment		
Total One-time Tax Revenues	[3]	\$11.4 million
Property Taxes		
Additional Property Tax Revenues from Demolition (10 years)	[4]	\$0.4 million
Additional Property Tax Revenues from BESS (10 years)	[5]	\$12.3 million
Total 10-Year Tax Revenues	[6]	\$12.8 million

Sources and Notes

City sales and use tax of 1.5%, as codified in the City of Morro Bay, Municipal Code, November 2022, Chapter 3.26.050. Available at:

https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodet=TIT3REFI_CH3.26TRUSTA.

Property tax is levied by the San Luis Obispo County Assessor’s Office at 1% of a property’s assessed value, of which the City receives approximately 13.7 cents per dollar paid on property located within the municipal limits of Morro Bay. City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final>.

[1] = \$586 Million x 1.5%.

[2] = \$176 Million x 1.5%.

[4] = \$30 Million x 0.137% x 10 Years.

[4] = \$901 Million x 0.137% x 10 Years.

The fiscal benefits presented in Table 4 do not include fiscal benefits arising from indirect or induced impacts associated with the BESS Project, such as economic activity associated with construction and demolition workers patronizing local businesses and operations or expenditures by local businesses. The estimated property tax revenues are also based on a conservative methodology that is likely to underestimate future property values and related

property tax payments. For these reasons, we believe Table 4 provides a conservative estimate of the BESS Project’s fiscal benefits to the City.

Furthermore, the Power Plant building and stacks are centrally located in the City and can obscure views of scenic features such as Morro Rock, the harbor, Morro Creek, and nearby beaches. The demolition of the Power Plant building and stacks could therefore represent a benefit to the City to the extent it improves scenic views and yields other direct or indirect economic impacts, such as increased tourism or increased values of nearby properties. These benefits are difficult to estimate with standard economic models and are not evaluated in this report.

2. Fiscal Benefits in the Context of the City Budget

To better contextualize the fiscal benefits described above, this section evaluates how the BESS Project’s expected fiscal benefits could affect the City’s Budget. For this analysis we use figures provided in the City’s 2023-2024 Budget, which is the most recent City budget available at the time of this report.³¹ The City’s 2023-2024 Budget acknowledges significant challenges and warns of future structural deficits if the City’s finances are not properly managed. For example, inflationary pressure has increased the City’s operating costs and hindered implementation of capital plans.³² The City has also acknowledged that its annual revenues have leveled off, while its expenditures continue to increase, in part due to significant pension obligations.³³

As explained above, the BESS Project would generate tax revenues for the City throughout the BESS Project’s construction, demolition, and operational phases. Firstly, the City would receive over \$11 million in one-time sales and use tax receipts from the construction and demolition phase. Subsequently, the City is expected to receive approximately \$1.28 million dollars per year in property taxes over the first ten years of operation of the BESS Project.

To contextualize these numbers, we first compare the funds arising from the construction and demolition phases to the costs of proposed City capital expenditures. Next, we compare the stream of revenues from property taxes to existing revenue streams and department budgets.

³¹ City of Morro Bay, Operating and Capital Budget, Adopted June 13, 2023, page 7 (“City Budget”). Available at: <https://www.morrobayca.gov/DocumentCenter/View/17850/FY-2023-24-Adopted-Budget-PDF>.

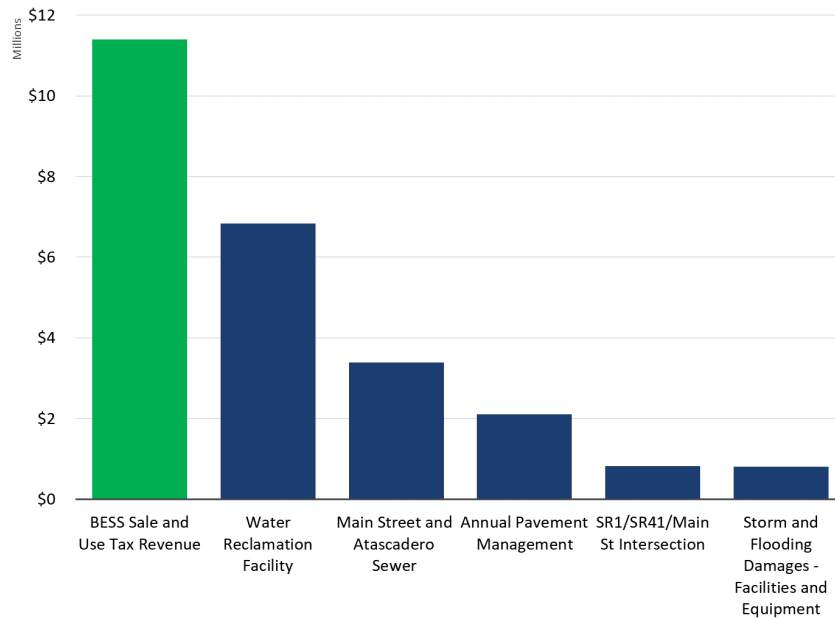
³² City Budget, page 7.

³³ City Budget, page 8.

Comparison to Proposed Capital Expenditures. The City’s 2023-2024 adopted Budget calls for \$19.5 million in expenditures across 31 separate capital projects.³⁴ As shown in Figure 3, the one-time sales and use tax payments from the BESS Project (\$11.4 million) could nearly fund the 3 largest capital projects proposed by the City (total cost of approximately \$12.3 million) and cover more than half the total proposed expenditure for capital projects (\$19.5 million).³⁵

This additional revenue source can be crucial, as the City expects annual capital needs to far exceed the City’s currently projected revenue streams.³⁶ The City’s total unrestricted funding currently has a \$5 million deficit and the City is using reserves in order to balance the Budget.³⁷ This deficit is forecast to remain above \$2 million in the coming years and the City states that it will not be able to fund planned capital improvements in the five-year forecast period.³⁸

FIGURE 3: COMPARISON OF BESS PROJECT CONSTRUCTION SALES AND USE TAX REVENUES TO SELECT CITY CAPITAL IMPROVEMENT PROJECTS



Sources and Notes

For BESS Project Sales and Use Tax Revenue, see Table 4. Capital Improvement project costs from City Budget, pages 131 and 181.

³⁴ City Budget, page 46.

³⁵ The three largest capital projects identified in the City Budget include the Water Reclamation Facility (\$6.8 million), Main Street and Atascadero Sewer Main Replacements (\$3.4 million), and Annual Pavement Management Program (\$2.1 million). City Budget, pages 131, 181. The total budget allocated for capital expenditures in Fiscal Year 2023-24 was \$19.5 million. City Budget, page 46.

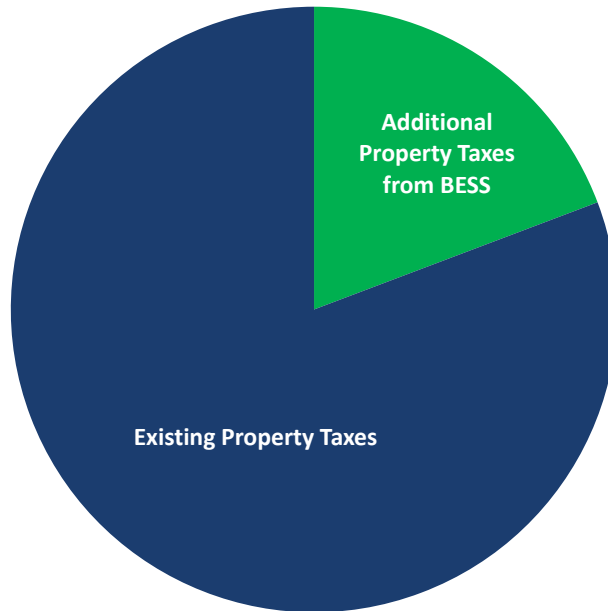
³⁶ City Budget, pg. 56.

³⁷ City Budget, pg. 55.

³⁸ City Budget, pg. 55.

Comparison to Other Revenue Streams. The \$1.28 million ongoing property tax revenues would represent roughly 25% of existing City property taxes, as shown in Figure 4. This estimate of ongoing revenues is conservative because of the assumption that the increase in property taxes will only equal the cost of construction of the BESS and the exclusion of any potential revenues related to the Vehicle License Fee (VLF) adjustment program.

FIGURE 4: COMPARISON OF ANNUAL BESS PROJECT PROPERTY TAX REVENUES TO EXISTING PROPERTY TAXES



Sources and Notes:

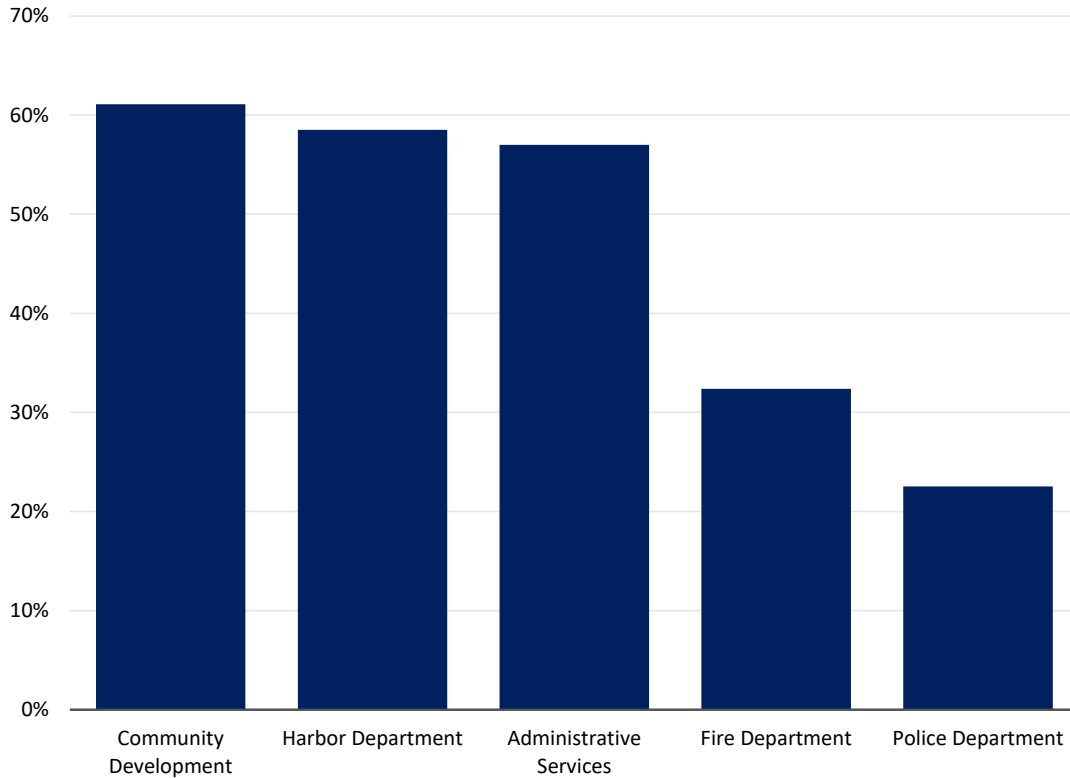
For BESS Project Annual Property Tax Revenue, see Table 4. Existing Property Taxes represent Budgeted Amount for 2024. City Budget, page 77.

Comparison to City Department Budgets. BESS Project property tax revenues could also be used to fund key portions of the City’s annual Budget. Figure 5 compares the annual tax revenues from the BESS Project to the current budgets of various City departments. Figure 5 shows that the BESS Project’s annual tax revenues would fund the entirety of the City Manager’s office (\$1.28 million) and more than half the 2024 budget for any of the following departments: Administrative Services (\$2.25 million), the Harbor Department (\$2.19 million), or Community Development (\$2.09 million).³⁹ Alternatively, Figure 5 shows that the BESS Project’s annual tax revenues could fund approximately 32% of the Fire Department’s 2024 budget or 23% of the Police Department’s 2024 budget.⁴⁰

³⁹ City Budget, page 81.

⁴⁰ City Budget, page 81.

FIGURE 5: ANNUAL BESS PROJECT PROPERTY TAX REVENUES AS A PERCENT OF CITY DEPARTMENT ANNUAL BUDGETS



For BESS Project Annual Property Tax Revenue, see Table 4. City Department Budgets represent Budgeted Amounts for 2024. City Budget, page 81.

IV. Fiscal Benefits of Potential Future Development Projects

The BESS Project is the only development project currently proposed on the Power Plant Property. However, the City is undertaking a land use planning process in connection with its consideration of the BESS Project.⁴¹ The end result of that process will be the creation of a Master Plan that identifies the uses that the City and local community wish to see on the Power Plant Property in the future.⁴² The draft Master Plan envisions that, except for the BESS Site, the Power Plant

⁴¹ City of Morro Bay, “Current Planning Projects.” Available at: <https://www.morrobayca.gov/842/Current-Planning-Projects>.

⁴² City of Morro Bay, “Morro Bay Battery Energy Storage System Project,” March 2024. Available at: <https://www.morrobayca.gov/842/Current-Planning-Projects>.

Property would be developed with visitor-serving commercial, open space, and public facilities.⁴³ Any future development on the Power Plant Property would need to obtain one or more new approvals from the City and other responsible agencies and would need to be consistent with applicable state and local laws and land use plans, including the forthcoming Master Plan.

To provide the City and local community with information that may prove useful during the Master Plan development process, Vistra requested that we investigate the potential tax revenue benefits to the City from future development on the Power Plant Property. This section provides a preliminary assessment of the additional property, sales and use, and transient occupancy tax revenues the City could receive in connection with such development. We emphasize that the analysis that follows is for informational purposes only. Neither we nor Vistra are advocating for any particular uses or development proposals in connection with this report.

This section begins with a brief discussion of the methodologies used in this analysis, including a discussion of the uses considered and how they were selected. We then provide a preliminary analysis of the fiscal benefits that potential future development could provide to the City.

A. Methodology

The fiscal benefits received by the City from future development efforts will depend on the types and scale of future uses. For this analysis, we evaluate six different potential uses on the Power Plant Property: (1) retail; (2) parking; (3) parks/open space; (4) hotel; (5) residential; and (6) mixed retail/residential. These uses were selected for two principal reasons. First, each of these uses is consistent with the current land use designations for the Power Plant Property as set forth in Plan Morro Bay, which serves as the City's General Plan and the Land Use Plan component of its Local Coastal.⁴⁴ Second, local community members identified each of these uses as potentially appropriate for the Power Plant Property in response to a recent City survey conducted in connection with the ongoing Master Plan process.⁴⁵

⁴³ City of Morro Bay, "Draft Master Plan," March 2024, page 2. Available at: <https://www.morrobayca.gov/ArchiveCenter/ViewFile/Item/7368>.

⁴⁴ City of Morro Bay, Plan Morro Bay, May 2021. Available at: <https://www.morrobayca.gov/DocumentCenter/View/15424/Plan-Morro-Bay-GP-LCP-Final>.

⁴⁵ Morro Bay Power Plant Master Plan Community Survey Summary, September 12, 2023. Available at: <https://www.morrobayca.gov/DocumentCenter/View/18067/Master-Plan-Survey-Response-Results>.

As in our assessment of fiscal benefits from the construction and demolition activities related to the BESS Project, we use a cash flow methodology to estimate fiscal benefits to the City from potential future development.⁴⁶ In addition, because this analysis is intended to inform the Master Plan process currently underway, we focus primarily on those economic benefits likely to be enjoyed by the City (rather than benefits enjoyed by the broader county, region, state, or property owners). The long-term fiscal benefits to the City from future development would consist primarily of tax revenues, i.e., sales and use tax, transient occupancy tax, and property tax revenues. The cash flow method is well suited to performing a preliminary assessment of such benefits.

Below we offer a brief discussion of our approach for calculating expected revenues from each tax considered for each development type. Appendix B provides a more thorough treatment of our methodology.

Property tax revenues. A common benefit to the City across all of the identified uses except park/open space is an increase in property tax receipts. For all uses except park/open space, we assume that property values increase by the estimated costs to construct the new uses. These increases are multiplied by the property tax rate to estimate additional property tax revenues. To the extent that future development enables profitable business activity on the site, the costs of construction would understate the expected increases in property values, rendering our assessment conservative.

Sales tax revenues. We also consider potential sales tax revenues from future retail, parking, hotel, and mixed retail/residential uses. To estimate sales tax revenues, the cash flow method assumes that future sales on the property will be similar to current sales patterns on nearby properties with similar uses. These sales projections are driven by several factors, including: area available for redevelopment, square feet of income-generating space, expected sales per square foot, and construction costs. These projected sales are then multiplied by the City's current sales tax rate to estimate sales tax revenues.

Transient occupancy tax revenues. To estimate transient occupancy taxes collected in connection with potential hotel uses, the cash flow method assumes that future occupancy rates on the Power Plant Property will be similar to current occupancy patterns and daily rates for

⁴⁶ We note that future development would likely yield additional direct, indirect, and induced economic impacts for the City, such as increasing tourism and associated commercial activity in the City. In addition, development may have non-economic benefits such as improving aesthetics or pedestrian mobility. While important, these benefits are difficult to estimate without detailed project information and are therefore beyond the scope of this report.

nearby hotels with similar characteristics. Expected booking revenues are multiplied by the City’s current transient occupancy tax rate to estimate transient occupancy tax revenues.

B. City Benefits

The fiscal benefits to the City from potential future development of the Power Plant Property evaluated in this report include additional property, sales, and transient occupancy tax revenues. Table 5 summarizes these potential fiscal benefits per acre of development of the specified use. As shown in Table 5, hotel use is expected to provide the greatest tax revenue benefits among those evaluated in this report.

To provide context for how much area currently exists within the Power Plant Property, Figure 6 shows different areas within the property and Table 6 shows the approximate acreage and current use of each area.

Neither we nor Vistra is advocating for any particular uses or development proposal in connection with this report, including the analysis that follows. Actual development opportunities are contingent on future land use and planning approvals from the City and our calculations are presented for illustrative purposes only.

TABLE 5: ANNUAL CITY TAX REVENUES PER ACRE FROM POTENTIAL FUTURE USES.

Potential Future Use [A]	City Property Tax Revenues [B]	City Sale Tax Revenues [C]	Transient Occupancy Tax Revenues [D]	Total Tax Revenues [E]
Retail	\$5,786	\$56,986	-	\$62,772
Parking	\$819	\$4,444	-	\$5,263
Parks/Open Space	-	-	-	-
Hotel	\$11,369	\$39,650	\$158,598	\$209,617
Residential	\$9,065	-	-	\$9,065
Mixed Retail/Residential	\$9,854	\$56,986	-	\$66,840

Sources and Notes

[A]: See Section IV.A for discussion of selection of uses.

[B]: Table 11.

[C]: Table 12.

[D]: See Section V.C.

[E] = SUM([B]:[D])

FIGURE 6: MAP OF AREAS ON THE MORRO BAY POWER PLANT PROPERTY



TABLE 6: SUMMARY OF AREAS

Area	Acreage	Current Use
1	0.8	Vacant Lot
2	6.9	Lila Keiser Park
3	21.7	Open Space
4	3.4	Coast Guard Storage
5	24.0	BESS
6	0.6	Intake
7	19.0	Decommissioned Power Plant
8	0.4	Parking Lot and Leased Dock
9	11.0	Open Space and Water Tower

V. Conclusion

This report shows that construction and operation of the BESS and the demolition of the Morro Bay Power Plant building and stacks would result in substantial tax revenues to the City. During construction of the BESS alone, Vistra's purchase of the batteries and other equipment would generate approximately \$11.4 million in sales or use taxes for the City. Once operational, the BESS is expected to generate about \$1.3 million annually in property tax revenues based only on the cost of improvements. Additionally, demolition of the Power Plant building and stacks will benefit the community by improving views and aesthetics, and will also raise the property value of the Demolition Site.

As a conservative estimate, and before considering the value of future redevelopment of the Demolition Site or other areas of the Power Plant Property, Vistra's proposed BESS Project would generate approximately \$24.2 million in additional tax revenues for the City from the construction and demolition phases and during the first ten years of BESS operations.

Future development on other areas of the Power Plant Property could also generate additional sales, transient occupancy, and property tax revenues to the City. To illustrate the potential benefits to the City from such potential development, we estimate tax revenue benefits associated with retail, parking, park/open space, hotel, residential, and mixed retail/residential uses. We find that fiscal benefits per acre of future development can be as high as \$210,000 per year and would be around \$60,000 for retail or mixed retail/residential uses.

We consider the estimates of fiscal benefits to the City provided in this report to be conservative for four principal reasons. First, the estimates of fiscal benefits to the City do not include certain tax revenues that would be collected as a result of direct economic activity related to the construction of the BESS Project or potential future development on other areas of the Power Plant Property. Second, we do not consider certain tax revenues that may arise from the operations of the BESS Project. Third, we do not consider potential "multiplier" or induced tax revenues from increased sales or wages associated with the BESS Project or potential future development efforts. Lastly, all property tax estimates assume that the increases in property values equal the costs of improvements, rather than the fair market value of the developed properties, thereby underestimating the amount of property taxes that would be paid.

Our estimates of economic impacts are also conservative because they focus solely on the construction of the BESS Project and not potential development activity (which is currently quite speculative) or the operations of the BESS Project or potential future development.

Appendix A: Macroeconomic Modeling Using IMPLAN

We rely on IMPLAN, a widely used input-output model designed to estimate the economic impacts of investment and policy changes. We use an implementation of the model that focuses on San Luis Obispo County. IMPLAN requires as inputs expected spending on construction and demolition projects by NAICS economic sector. Below, we present the inputs that we supply to IMPLAN for the BESS construction and Power Plant site demolition projects.

Construction of the BESS

Vistra plans to spend \$902 million on the construction of the BESS. We assume that costs related to batteries (\$586 million) are not spent locally and, therefore, only the remaining expenditure (\$316 million) was modelled using IMPLAN.⁴⁷ Construction costs were allocated to individual category components using a National Renewable Energy Laboratory (NREL) report, specifically for a utility-scale storage project (4-Hour Duration, 240-MWh).⁴⁸ We mapped these categories to IMPLAN sectors, as seen in Table 7.

TABLE 7: IMPLAN CATEGORIES OF CONSTRUCTION COSTS

IMPLAN Sector Name	IMPLAN Sector		Expenditure
	Code	NREL Category	
All other miscellaneous electrical equipment and component manufacturing	339	Battery Central Inverter	\$43.8 million
Wholesale - Machinery, equipment, and supplies	395	Structural BOS	\$5.0 million
All other miscellaneous electrical equipment and component manufacturing	339	Electrical BOS	\$80.5 million
Construction of new power and communication structures	52	Installation Labor & Equipment	\$21.9 million
Construction of new power and communication structures	52	EPC Overhead	\$21.1 million
State/Local Govt Other Services	12001	Sales Tax	\$33.6 million
Legal services	455	Permitting fee	\$1.4 million
Legal services	455	Interconnection fee	\$10.2 million
Construction of new power and communication structures	52	Contingency	\$19.7 million
Construction of new power and communication structures	52	Developer overhead	\$41.5 million

⁴⁷ NREL allocates a portion of the costs of a typical storage project to net profit. We also exclude this category from our analysis.

⁴⁸ U.S. Solar Photovoltaic System and Energy Storage Cost Benchmarks, With Minimum Sustainable Price Analysis, National Renewable Laboratory, 2022. Available at: <https://www.nrel.gov/docs/fy22osti/83586.pdf>.

Demolition of the Power Plant

Vistra anticipates demolition costs of \$30 million. The entirety of these costs were mapped to the “Waste Management and Remediation Services” IMPLAN category.

TABLE 8: IMPLAN CATEGORIES OF DEMOLITION COSTS

IMPLAN Sector Name	IMPLAN Sector Code	Decommissioning Expenditure
Waste management and remediation services	479	\$30,000,000

IMPLAN Results

TABLE 9: IMPACT OF CONSTRUCTION OF THE BATTERY FACILITY

Impact	Jobs Supported (Job-Years)	Labor Income Supported	Economic Activity Supported	Output
Direct	1,515	\$132.3 million	\$172.0 million	\$321.2 million
Indirect	282	\$16.0 million	\$29.8 million	\$60.3 million
Induced	493	\$25.4 million	\$50.4 million	\$83.9 million
Total	2,290	\$173.7 million	\$252.1 million	\$465.3 million

TABLE 10: ECONOMIC IMPACT OF DEMOLITION

Impact	Jobs Supported (Job-Years)	Labor Income Supported	Economic Activity Supported	Output
Direct	107	\$9.0 million	\$15.1 million	\$30.6 million
Indirect	47	\$2.7 million	\$4.3 million	\$8.6 million
Induced	38	\$1.9 million	\$3.9 million	\$6.4 million
Total	192	\$13.6 million	\$23.2 million	\$45.6 million

Appendix B: Fiscal Benefits from Potential Future Development

In this appendix, we provide the details of our calculations of the fiscal benefits to the City from various potential development types.

A. Property Tax Revenues

Below we explain how we calculate costs of construction for each identified use. To allow for easier comparison, construction costs are presented on a per-acre basis.

Retail. Construction costs for retail sites have two components: the cost of constructing buildings and the cost of adding required parking spaces. To estimate construction costs associated with new buildings, we multiply the square feet of retail space available by \$403, which is the transaction sale price per square foot of retail space in San Luis Obispo-Paso Robles-Arroyo Grande for the first quarter of 2022, inflation adjusted to December 2023 dollars.⁴⁹ We also assume that retail uses require construction of new parking facilities, per the City’s Zoning Code.⁵⁰ We assume that this parking would be surface level, which involves construction costs of approximately \$4,983 per parking space, or approximately \$14.24 per square foot.⁵¹ In consideration of the Maximum Floor Area Ratio and other specifications listed in the Morro Bay Zoning Code, we assume that each acre of retail could support 10,052 square feet of retail

⁴⁹ National Association of Realtors, “Commercial Real Estate Metro Market Report | 2022.Q1 – San Luis Obispo, Pasco Robles, Arroyo Grande,” p. 40. Available at: <https://www.nar.realtor/sites/default/files/documents/2022-q1-commercial-metro-market-reports-ca-05-09-2022.pdf>.

⁵⁰ Under the Zoning Code adopted in 2022, every 300 square feet of retail requires a parking space. We assume that, due to other zoning restrictions, such as a requirement for 10 foot setbacks to Residential Districts for Visitor Serving Commercial properties, only 50% of property is available for construction. City of Morro Bay, “City Council Adopted Zoning Code/Implementation Plan,” November 2022, p. 188. Available at: https://www.morrobayca.gov/DocumentCenter/View/17256/2022-Zoning-Code_IP.

⁵¹ Construction costs are inflation-adjusted to December 2023 dollars. Off-street parking typically requires between 250 to 350 square feet (sf) per space, including access lanes and landscaping; we conservatively assume 350 square feet per space. Victoria Transport Policy Institute, “Comprehensive Parking Supply, Cost and Pricing Analysis,” November 9, 2023, pp. 15, 20. Available at: <https://www.vtpi.org/pscp.pdf>.

space.⁵² In sum, we estimate construction costs of approximately \$4.22 million per acre of retail use.⁵³

Parking. For the purposes of this analysis, we assume that all parking would be surface-level with no underground or multi-story construction (e.g., parking garages). As noted, we assume that the construction cost of each surface-level parking space is \$4,983.⁵⁴ We estimate that a one acre surface parking facility could accommodate approximately 120 spaces, for a total construction cost of approximately \$597,967 per acre.⁵⁵

Parks/Open Space. For parks/open space, we assume that areas under these uses would be dedicated to the City or a non-profit group, which would pay low or no property taxes. For that reason, we assume park/open space uses would provide no additional property tax revenues to the City.

Hotel. The construction costs of hotels varies depending on the size and target customer base (e.g., economy versus luxury hotels). We assume that future hotel uses could serve a variety of customers and therefore use the average construction cost for new hotels, which is estimated to be \$202,408 per room.⁵⁶ These estimates only represent building and site improvement costs,

⁵² The square feet of retail per acre available is calculated as 43,560 (the number of square feet per acre), taking 50% of that value, then an additional scaling of 6/13. We assume that, due to other zoning restrictions, such as a requirement for 10-foot setbacks to Residential Districts for Visitor Serving Commercial properties, only 50% of property is available for construction. We multiply by 6/13 to reflect the City's Zoning Code adopted in 2022, which requires one parking space for every 300 square feet of retail. Assuming that a parking space covers 350 square feet leaves 6/13 of remaining space available for retail construction. City of Morro Bay, "City Council Adopted Zoning Code/Implementation Plan," November 2022, p. 188. Available at: https://www.morrobayca.gov/DocumentCenter/View/17256/2022-Zoning-Code_IP.

⁵³ We assume that one acre of land could accommodate 10,052 square feet of retail space and 34 associated parking spaces. $(10,052 \text{ sf} * \$403/\text{sf}) + (34 \text{ spaces} * \$4,983/\text{space}) = \$4,223,506$.

⁵⁴ Construction costs are inflation-adjusted to December 2023 dollars. Victoria Transport Policy Institute, "Comprehensive Parking Supply, Cost and Pricing Analysis," November 9, 2023, p. 20. Available at: <https://www.vtppi.org/pscp.pdf>.

⁵⁵ We assume that each acre of land can accommodate 120 parking spaces. Ron Holland, "Estimating the Number of Parking Spaces Per Acre," University of Tennessee Institute of Agriculture, May 2014, p. 2. Available at: <https://utia.tennessee.edu/cpa/wp-content/uploads/sites/106/2020/10/CPA-222.pdf>. We adjusted the 150-space arrangement for potential exits and entrances or avoidance of trees and hills.

⁵⁶ Construction cost taken from HVS U.S. Hotel Development Cost Survey, an annual report compiling development costs of hotels across the United States. These estimates only represent building and site improvement costs, excluding costs of items such as furniture, fixtures, and equipment, some of which may impact taxable value. Average Building and Site Improvements costs are inflation adjusted from December 2022 to December 2023 dollars. Luigi Major, "HVS U.S. Hotel Development Cost Survey 2023," HVS, July 27, 2023, Exhibit 2. Available at: <https://www.hvs.com/article/9704-hvs-us-hotel-development-cost-survey-2023>.

excluding costs of items such as furniture, fixtures, and equipment, which would not impact taxable value. We estimate that hotel uses could accommodate 41 rooms per acre.⁵⁷ This indicates construction costs of approximately \$8.3 million per acre.⁵⁸

Residential. To calculate the property value of residential units, we assume a density of 14 units per acre.⁵⁹ We further conservatively estimate that construction costs would be similar to those associated with a nearby low-income housing project, which equals \$472,626 per unit after adjusting for inflation.⁶⁰ We therefore estimate construction costs of residential uses to be approximately \$6.6 million per acre.⁶¹

Mixed Retail/Residential. For this analysis, we assume a first floor consisting of retail use and a second floor of residential use. To determine the number of residential units that can be built above the retail space, we assume that 75% of the second-floor space (equal to the area of first floor retail space) will be living space and that each unit will be 1200 square feet in size.^{62,63} We again apply a construction cost of \$472,626 per residential unit, yielding a residential

⁵⁷ A nearby Hampton Inn located on a 2.02-acre site covers approximately 53,358 square feet (1.22 acres), contains 83 rooms, and 92 parking spaces, which equates to approximately 26,414 square feet of hotel uses with 41 rooms and 46 parking spaces on a per-acre basis. SWCA Environmental Consultants, "Mitigated Negative Declaration 295 Atascadero Road, Morro Bay Hotel," December 2019, p. 2. Available at: <https://www.morrobayca.gov/DocumentCenter/View/13941/Morro-Bay-Hotel-MND-295-Atascadero>.

⁵⁸ (41 rooms * \$202,408/room) = \$8,298,728.

⁵⁹ The City's Zoning Code authorizes up to 27 units per acre in Visitor Serving Commercial areas with a Mixed Use Residential overlay, subject to Conditional Use Permit approval. We assume a density of 14 units per acre to provide a conservative estimate. City of Morro Bay, "City Council Adopted Zoning Code/Implementation Plan," November 2022, p. 59 (§ 17.08.020), 134 (§17.16.030). Available at: https://www.morrobayca.gov/DocumentCenter/View/17256/2022-Zoning-Code_IP.

⁶⁰ In 2023, a 35-unit low-income housing development was completed at 405 Atascadero Rd in Morro Bay, which is immediately across Highway 1 from Lila Keiser Park. Construction costs of the project were reported by the Housing Authority of San Luis Obispo (HASLO) Construction Director to be \$471,000 per unit. Inflation adjusted to December 2023 dollars. Neil Farrell, "An Affordable Housing Gold Rush," Estero Bay News, July 31, 2023. Available at: <https://esterobaynews.com/featured-stories/an-affordable-housing-gold-rush/>.

⁶¹ \$472,626/unit * 14 units = \$6,616,764.

⁶² The average apartment building has an efficiency ratio (total rentable space over total space inclusive of hallways, common areas, and elevators) of 70 to 75%. We multiply retail area by this ratio to calculate the area of residential space. Home Builder Digest, "Building Efficiency Ratio, Efficiency Factor, and Core Factor for Commercial Properties". Available at: <https://www.multifamilyrefinance.com/glossary/building-efficiency-ratio-in-real-estate>.

⁶³ The units built at 405 Atascadero Rd ranged between 800-1200 square feet in size; we assume that units will equal 1200 square feet in size. Neil Farrell, "An Affordable Housing Gold Rush," Estero Bay News, July 31, 2023. Available at: <https://esterobaynews.com/featured-stories/an-affordable-housing-gold-rush/>.

construction cost of \$2.97 million per acre.^{64,65} We assume a retail construction cost of \$4.22 million per acre—the same as applied in the case of solely retail use.⁶⁶ The total construction cost for both floors is \$7.19 million per acre.⁶⁷

Property Tax Calculation. Using the costs of construction estimated above, we calculate the annual property tax revenues the City would expect for each of these uses. The San Luis Obispo County Assessor’s Office levies property tax of 1% of a property’s assessed value and the City receives approximately 13.7 cents of every dollar in property taxes paid for a property located within the municipal limits of Morro Bay.⁶⁸ Table 11 summarizes the expected annual property tax revenues collected by the City for each use.

TABLE 11: ANNUAL CITY PROPERTY TAX REVENUES PER ACRE FROM POTENTIAL FUTURE USES

Potential Future Use [A]	Annual City Property Tax Revenues [B]
Retail	\$5,786
Parking	\$819
Parks/Open Space	-
Hotel	\$11,369
Residential	\$9,065
Mixed Retail/Residential	\$9,854

Sources and Notes

See Section IV.A for discussion on selection of uses.

Property tax is levied by the San Luis Obispo County Assessor’s Office at 1% of a property’s assessed value, of which the City receives approximately 13.7 cents per dollar paid on property located within the municipal limits of Morro Bay. City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final>.

Increase in assessed value assumed to be construction cost.

The estimates provided in Table 11 are conservative because they do not consider any increases in property value from profitable business activities conducted on the property following the construction of new uses. In addition, these figures only estimate the property tax

⁶⁴ See footnote 60.

⁶⁵ \$472,626/unit *10,052 total sf per acre*0.75 sf residential/sf total/1200 sf residential per acre = \$2,969,272 per acre.

⁶⁶ See footnote 53.

⁶⁷ \$2,969,272 per acre + \$4,223,506 = \$7,192,867 per acre.

⁶⁸ City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023, p. 4. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final>.

benefits associated with the identified uses. They do not capture other expected fiscal benefits, such as sales and use taxes collected during construction, or indirect economic impacts from construction activity or subsequent increased commercial activity.

B. Sales Tax Revenues

The data necessary to complete these cash flows come from several local sources, including the 2016 Morro Bay General Plan, National Association of Realtors' Commercial Real Estate Metro Reports, and several feasibility studies conducted in the region.

Retail and Mixed Retail/Residential. For sales associated with these uses, we multiply the square feet of retail space by expected annual sales per square foot. Based on 2016 calculations by the City and after adjusting for inflation to December 2023 dollars, we estimate \$227 of annual sales per square foot of retail space.⁶⁹ This results in approximately \$2.3 million in annual sales revenue per acre of retail use.⁷⁰

Parking. We acknowledge that new parking facilities could be metered or unmetered and could be publicly owned (e.g., by the City) or privately owned. Unmetered/free parking facilities would generate no sales and therefore no sales tax revenues. On the other hand, if the City owns metered parking spaces, the City would receive parking revenues that exceed any sales tax revenues from privately-owned metered facilities. For this analysis, we assume new parking uses are metered and privately owned. Based on a 2021 City study, we estimate that each metered parking space would result in annual revenues of \$1,481.⁷¹ We further estimate that new parking uses could accommodate approximately 120 spaces per acre, including necessary access lanes and landscaping.⁷² This results in approximately \$177,761 in annual parking revenues.

⁶⁹ Weighted average retail sales per square foot as described in the 2016 Morro Bay General Plan. Weighted by potential supportable space. Table 4-1 in City of Morro Bay, "Plan Morro Bay," December 2016, p. 4-2. Available at: <http://www.morrobayca.gov/DocumentCenter/Home/View/10345>.

⁷⁰ As explained in Section IV.B.1, we conservatively estimate that one acre of land can accommodate 10,052 square feet of retail space. 10,052 square feet * \$227/square foot = \$2,279,422.

⁷¹ The 2021 parking feasibility study estimated gross revenue per spot to be \$1,300, or \$1,481 after adjusting for inflation. Walker Consultants, "Morro Bay Public Parking Management Study," April 26, 2021, p. 34. Available at: https://www.morrobayca.gov/DocumentCenter/View/18165/Morro-Bay-Public-Parking-Study_20210426.

⁷² We assume that each acre of land can accommodate 120 parking spaces. Ron Holland, "Estimating the Number of Parking Spaces Per Acre," University of Tennessee Institute of Agriculture, May 2014, p. 2. Available at: <https://utia.tennessee.edu/cpa/wp-content/uploads/sites/106/2020/10/CPA-222.pdf>. We adjusted the 150-space arrangement for potential exits and entrances and avoidance of trees and hills.

Hotel. To calculate sales tax revenues, we first estimate room booking revenue per day by multiplying the number of rooms by the average occupancy rate and average daily room rate.^{73,74,75} This results in approximately \$4,345 of room booking revenue per day or \$1.59 million per year.⁷⁶

Table 12 summarizes the estimated annual sales tax revenues associated with retail, hotel, and mixed retail/residential uses, applying the City’s current sales tax rate of 1.5% and assuming the additional 1% from the State continues being provided to the City for purchases that occur within the City, for a total of 2.5%.⁷⁷ The estimated revenues are provided on a per-acre basis.

TABLE 12: ANNUAL CITY SALES TAX REVENUES PER ACRE FROM POTENTIAL FUTURE USES.

Potential Future Use	Annual City Sales Tax Revenues
[A]	[B]
Retail	\$56,986
Parking	\$4,444
Parks/Open Space	-
Hotel	\$39,650
Residential	-
Mixed Retail/Residential	\$56,986

Sources and Notes

See Section IV.A for discussion on selection of uses.

The City generally earns 2.5 cents on every dollar. City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023, p. 5. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final->

⁷³ As explained in Section IV.B.1, based on a recent nearby hotel project, we estimate hotel uses could accommodate 41 rooms per acre.

⁷⁴ We assume an occupancy rate similar to other hotels in Morro Bay and San Luis Obispo County, which is roughly 70%. SMG Consulting, “Morro Bay Tourism Destination Tourism Strategy,” December 2018, p. 4. Available at: <https://www.morrobayca.gov/Archive/ViewFile/Item/4859> and STR Market Trend Report SLO-Paso (average from 2014-2019).

⁷⁵ We conservatively assume the daily room rate to be \$151, which was calculated by taking the average daily rate for hotels in Morro Bay in December 2018 (\$124) and adjusting for inflation. STR Market Trend Report Morro Bay; SMG Consulting, “Morro Bay Tourism Destination Tourism Strategy,” December 2018, p. 15. Available at: <https://www.morrobayca.gov/Archive/ViewFile/Item/4859>.

⁷⁶ 41 rooms * 70% occupancy * \$151/day = \$4,345/day. \$4,345/day * 365 days = \$1,585,984.

⁷⁷ The base statewide sales and use tax rate is 7.25% and the City’s General Fund receives 1 cent of that base tax. Additionally, sales are charged a 1.5% City sales tax, which is collected through voter-approved Measure E-20. City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023, p. 5. Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final->

We believe that the estimates provided in Table 12 are conservative because they do not consider the indirect and induced sales tax benefits associated with the identified uses, such as any spending by hotel guests, parking customers, or residents of the city at nearby businesses. They also do not capture any sales or use taxes that would be collected during construction of new uses, including from the sale of construction materials and from workers patronizing local businesses.

C. Transient Occupancy Tax Revenues

Hotel uses would provide an additional benefit to the City in the form of transient occupancy tax revenues. As set forth in the preceding section, we estimate that one acre of new hotel use would generate approximately \$4,345 in room booking revenues per day or \$1.59 million per year. Applying the City's transient occupancy tax rate of 10%, this results in approximately \$158,598 of annual transient occupancy tax revenues per acre of new hotel uses.⁷⁸

⁷⁸ Visitors to Morro Bay are taxed at a rate of 10% of the rent charged by the Hotel Operator. City of Morro Bay, Municipal Code, November 2022, Chapter 3.24.030. Available at: https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodetid=TIT3REFI_CH3.24TROCTAu.

Appendix C: References

California Department of Tax and Fee Administration, “Effective Sales and Use Tax Rates.”

Available at: <https://www.cdtfa.ca.gov/dataportal/dataset.htm?url=SalesTaxRates>.

California Revenue & Taxation Code § 7203.1(a)(1). Available at:

<https://leginfo.legislature.ca.gov/faces/codesTOCSelected.xhtml?tocCode=RTC&tocTitle=+Revenue+and+Taxation+Code+-+RTC>.

City of Morro Bay, “City Council Adopted Zoning Code/Implementation Plan” November 2022.

Available at: <https://www.morrobayca.gov/DocumentCenter/View/17256/2022-Zoning-Code-IP>.

City of Morro Bay, “City of Morro Bay Midyear Budget Report FY 2022-23,” February 2023.

Available at: <https://www.morrobayca.gov/DocumentCenter/View/17552/C21-FY-22-23-Mid-yearReport-Final>.

City of Morro Bay, “Current Planning Projects.” Available at:

<https://www.morrobayca.gov/842/Current-Planning-Projects>.

City of Morro Bay, “Draft Master Plan,” March 2024, page 2. Available at:

<https://www.morrobayca.gov/ArchiveCenter/ViewFile/Item/7368>.

City of Morro Bay, “Draft of Plan Morro Bay,” August 2016. Available at:

<https://www.morrobayca.gov/DocumentCenter/View/9919/Key-Issues-and-Policies-Report-August-2016-Draft-KIP?bidId=>.

City of Morro Bay, “Morro Bay Battery Energy Storage System Project,” March 2024. Available

at: <https://www.morrobayca.gov/842/Current-Planning-Projects>.

City of Morro Bay, “Morro Bay Power Plant Master Plan Community Survey Summary,”

September 2023. Available at:

<https://www.morrobayca.gov/DocumentCenter/View/18067/Master-Plan-Survey-Repsone-Results>.

City of Morro Bay, “Operating and Capital Budget,” Adopted June 13, 2023, page 81. Available

at: <https://www.morrobayca.gov/DocumentCenter/View/17850/FY-2023-24-Adopted-Budget-PDF>.

City of Morro Bay, “NOP/Environmental Impact Report of 600-MW Morro Bay Battery Energy Storage System Project,” June 3, 2022. Available at:

<https://www.morrobayca.gov/DocumentCenter/View/16703/Morro-Bay-BESS-NOP>.

City of Morro Bay, “Plan Morro Bay,” December 2016. Available at:

<http://www.morrobayca.gov/DocumentCenter/Home/View/10345>.

City of Morro Bay, “Plan Morro Bay,” May 2021. Available at:

<https://www.morrobayca.gov/DocumentCenter/View/15424/Plan-Morro-Bay-GP-LCP-Final>.

- City of Morro Bay, Municipal Code, November 2022, Chapter 3.20.020. Available at:
https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodeId=TIT3R_EFI_CH3.20SAUSTA_3.20.020RA.
- City of Morro Bay, Municipal Code, November 2022, Chapter 3.24.030. Available at:
https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodeId=TIT3R_EFI_CH3.24TROCTA.
- City of Morro Bay, Municipal Code, November 2022, Chapter 3.26.050. Available at:
https://library.municode.com/ca/morro_bay/codes/code_of_ordinances?nodeId=TIT3R_EFI_CH3.26TRUSTA.
- Daniel Raimi, “Decommissioning US Power Plants: Decisions, Costs, and Key Issues.” Resources for the Future: Washington, DC, October 2017. Available at:
<https://media.rff.org/documents/RFF20Rpt20Decommissioning20Power20Plants.pdf>.
- Luigi Major, "HVS U.S. Hotel Development Cost Survey 2023," HVS, July 27, 2023, Exhibit 2. Available at: <https://www.hvs.com/article/9704-hvs-us-hotel-development-cost-survey-2023>.
- National Association of Realtors, “Commercial Real Estate Metro Market Report | 2022.Q1 – San Luis Obispo, Pasco Robles, Arroyo Grande.” Available at:
<https://www.nar.realtor/sites/default/files/documents/2022-q1-commercial-metro-market-reports-ca-05-09-2022.pdf>.
- Neil Farrell, “An Affordable Housing Gold Rush,” Estero Bay News, July 31, 2023. Available at:
<https://esterobaynews.com/featured-stories/an-affordable-housing-gold-rush/>.
- Ron Holland, “Estimating the Number of Parking Spaces Per Acre,” University of Tennessee Institute of Agriculture, May 2014. Available at: <https://utia.tennessee.edu/cpa/wp-content/uploads/sites/106/2020/10/CPA-222.pdf>.
- Home Builder Digest, "Building Efficiency Ratio, Efficiency Factor, and Core Factor for Commercial Properties," Home Builder Digest. Available at:
<https://www.multifamilyrefinance.com/glossary/building-efficiency-ratio-in-real-estate>.
- San Luis Obispo County Assessor, 2023 Annual Report. Available at:
<https://www.slocounty.ca.gov/Departments/Assessor/Forms-Documents/Annual-Reports/2023-Assessor-Annual-Report.pdf>.
- SMG Consulting. “Morro Bay Tourism Destination Tourism Strategy,” December 2018. Available at: <https://www.morrobayca.gov/Archive/ViewFile/Item/4859>.
- “January 2014 to August 2022 STR Market Trend Report Morro Bay,” Smith Travel Research, Created October 7, 2022.
- “January 2014 to August 2022 STR Market Trend Report SLO-Paso,” Smith Travel Research, Created October 7, 2022.

SWCA Environmental Consultants, “Mitigated Negative Declaration 295 Atascadero Road, Morro Bay Hotel,” December 2019. Available at: <https://www.morrobayca.gov/DocumentCenter/View/13941/Morro-Bay-Hotel-MND-295-Atascadero>.

Victoria Transport Policy Institute, “Comprehensive Parking Supply, Cost and Pricing Analysis,” November 9, 2023. Available at” <https://www.vtpi.org/pscp.pdf>.

Vistra, Corp., “Morro Bay Energy Storage Project,” February 2021. Available at: <https://www.morrobayca.gov/DocumentCenter/View/15093/Vistra---Morro-Bay---Battery-Project-Presentation-022021>.

Walker Consultants, “Morro Bay Public Parking Management Study,” April 26, 2021. Available at: https://www.morrobayca.gov/DocumentCenter/View/18165/Morro-Bay-Public-Parking-Study_20210426.