

The Economic Impacts of Allowing Access to the Eastern Gulf of Mexico for Oil and Natural Gas Exploration and Development Supplement: Projected State, Local and Federal Tax Receipts

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Tax Impact Summary

If oil and natural gas is developed in federal waters of the Eastern Gulf of Mexico currently unavailable for oil and natural gas exploration and production, state and local governments will receive revenues even without a revenue sharing agreement with the federal government. This supplement report projects potential federal, state and local tax and other government revenue impacts of oil and natural gas development in the Eastern Gulf of Mexico based on the recently completed study, “The Economic Impacts of Allowing Access to the Eastern Gulf of Mexico for Oil and Natural Gas Exploration and Development”.¹ The projected government revenue below is based on current laws and excludes all potential royalties, rents, and bonus bids. For the purposes of this report “Taxes” may be used to refer to taxes, fees, donations, and other sources of state/local (including country) and federal government revenues excluding royalties, rents, and bonus bids. (Table 1)

Table 1: Summary Table Potential State Local, and Federal Tax Impacts* from Eastern Gulf of Mexico Oil and Natural Gas Development (\$Millions)

Tax Impacts (\$Millions)	First Leasing + 3 Years	First Leasing + 10 Years	First Leasing + 20 Years	Cumulative 20 Years
State and Local- Personal Income and Payroll Taxes	\$8	\$137	\$247	\$2,547
State and Local- Personal Property and Other Taxes and Fees	\$3	\$42	\$77	\$786
State and Local- Coporate Income Tax (Including Dividends)	\$1	\$25	\$43	\$453
State and Local- Business Sales, Property, Excise, Custom and Other	\$27	\$548	\$1,046	\$10,509
Federal- Personal Income and Payroll Taxes	\$73	\$1,143	\$2,076	\$21,394
Federal- Coporate Income Tax (Including Dividends)	\$10	\$203	\$352	\$3,697
Federal- Business Sales, Property, Excise, Custom and Other	\$3	\$67	\$128	\$1,286
State and Local - Total	\$39	\$752	\$1,411	\$14,295
Federal - Total	\$86	\$1,413	\$2,556	\$26,377
Total	\$126	\$2,164	\$3,967	\$40,672

Source: Calash

*The above table excludes Royalties, Bonuses, and Rents

¹ “The Economic Impacts of Allowing Access to the Eastern Gulf of Mexico for Oil and Natural Gas Exploration and Development”, Calash, March 9, 2018.

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Section 2 – Methodology

A detailed tax analysis of offshore oil and gas development is beyond the scope of this supplement. However, state, local and federal tax receipts can be estimated using historical relationships between spending by industry sector and government revenue.

State tax impacts in this supplement were calculated using the IMPLAN (Economic Impact Analysis for Planning) model tax report which provides an input-output multiplier on spending at the industry and state levels for each defined category. The IMPLAN tax model estimates taxes and other payments received by governments. IMPLAN tracks social accounts within a region to track monetary flows, both market and non-market, between industries and institutions. Market flows are flows between producers of goods and services and consumers. Non-market flows are flows between institutions. Data sources for IMPLAN include: the Bureau of Economic Analysis' (BEA) national income and product accounts (NIPA), the U.S. Census Bureau's consumer expenditure surveys, the U.S. Census Bureau's annual State/Local Government receipts and expenditures data, and the BEA's Regional Economic Accounts.

Model outputs considered from spending effects are divided into 17 different tax types including social insurance taxes (Employee Contributions and Employer Contributions), taxes on production and imports (Sales Tax, Property Tax, Motor Vehicle Licensing, Severance Tax, Other Taxes, State/Local Nontaxes, Federal Nontaxes, Excise Taxes, Custom Duty), Corporate Profits Tax, and Personal Taxes (Income Tax, Nontaxes (Fines and Fees), Motor Vehicle License, Property Taxes, Other Tax (Fish/Hunting)). For the purposes of this report these tax types were consolidated into four categories, Personal Income and Payroll Taxes, Personal Property and Other Taxes and Fees, Corporate Income Tax (Including Dividends), and Business Sales, Property, Excise, Custom and Other Taxes according to the following table. (Table 2)

Table 2: Tax Type Category Consolidation

Implan Category	Consolidated Category
Dividends	Corporate Income Tax (Including Dividends)
Social Ins Tax- Employee Contribution	Personal Income and Payroll Taxes
Social Ins Tax- Employer Contribution	Personal Income and Payroll Taxes
TOPI: Sales Tax	Business Sales, Property, Excise, Custom and Other
TOPI: Property Tax	Business Sales, Property, Excise, Custom and Other
TOPI: Motor Vehicle Lic	Business Sales, Property, Excise, Custom and Other
TOPI: Severance Tax	Business Sales, Property, Excise, Custom and Other
TOPI: Other Taxes	Business Sales, Property, Excise, Custom and Other
TOPI: S/L NonTaxes	Business Sales, Property, Excise, Custom and Other
Corporate Profits Tax	Corporate Income Tax (Including Dividends)
Personal Tax: Income Tax	Personal Income and Payroll Taxes
Personal Tax: NonTaxes (Fines- Fees)	Personal Property and Other Taxes and Fees
Personal Tax: Motor Vehicle License	Personal Property and Other Taxes and Fees
Personal Tax: Property Taxes	Personal Property and Other Taxes and Fees
Personal Tax: Other Tax (Fish/Hunt)	Personal Property and Other Taxes and Fees
TOPI: Excise Taxes	Business Sales, Property, Excise, Custom and Other
TOPI: Custom Duty	Business Sales, Property, Excise, Custom and Other
TOPI: Fed NonTaxes	Business Sales, Property, Excise, Custom and Other

Source: Calash

IMPLAN uses a variety of data sources to derive potential tax revenues. TOPI tax multipliers are typically derived from national totals provided by the BEA's national income and product accounts and distributed based on the U.S. Census Bureau's state/local government receipts and expenditures data. Other tax multipliers are derived from state/local government receipts and expenditures data and other sources listed above. The categories (which are typically divided into federal and state/local in the IMPLAN tax report) are listed in the following table. (Table 3)

Table 3: IMPLAN Tax Categories

Implan Category	Description
Social Ins Tax- Employee Contribution	Retirement plans, temporary disability, social security, survivors insurance, disability insurance, hospital insurance, supplemental medical insurance, unemployment insurance, veterans' life insurance, and railroad retirement plans. Paid for by employee.
Social Ins Tax- Employer Contribution	Retirement plans, temporary disability, social security, survivors insurance, disability insurance, hospital insurance, supplemental medical insurance, unemployment insurance, veterans' life insurance, and railroad retirement plans. Paid for by employer.
TOPI: Sales Tax	Sales Tax based on BEA national income and product accounts
TOPI: Property Tax	Property tax based on BEA national income and product accounts
TOPI: Motor Vehicle Lic	Motor vehicle operator's license tax and motor vehicle license tax
TOPI: Severance Tax	Severance taxes based on the BEA national income and product accounts
TOPI: Other Taxes	Business licenses and documentary and stamp taxes
TOPI: S/L NonTaxes	Rents and royalties, special assessments, fines, settlements, and donations
Corporate Profits Tax	Taxes on corporate profits
Personal Tax: Income Tax	Withholdings, declarations and final settlements less refunds
Personal Tax: NonTaxes (Fines- Fees)	Fines and donations
Personal Tax: Motor Vehicle License	Personal motor vehicle fee payments to State and Local Governments.
Personal Tax: Property Taxes	Personal property tax payments to State and Local Governments
Personal Tax: Other Tax (Fish/Hunt)	Hunting, fishing, and other personal licenses

Source: Calash

A detailed explanation of the tax categories and the data sources used to calculate is available in the document, "Generation and Interpretation of IMPLAN's Tax Impact Report."²

All taxes outputs provided by the IMPLAN tax report are divided into federal (taxes paid to the federal government) and state/local which account for all state and local units of government including counties in this report. If a particular type of government unit does not exist in an area, there will be zero tax impacts associated with that government type. The meaning of each tax type (ex. sales tax) is consistent across jurisdictions.

The IMPLAN tax report assumes that marginal changes or impacts in a given area in the future will be distributed in the same way as in the base years' social accounts. This assumes that the current picture of an economy holds true for future changes which may not be accurate.

Payments to governments are industry and institution specific. Spending was allocated to specific industries based on the industry spending projected in the report, "The Economic Impacts of Allowing Access to the Eastern Gulf of Mexico for Oil and Natural Gas Exploration and Development". Where no exact match was available between the BEA RIMS II industries used in that report and IMPLAN industries the closest available industry was used. While the level of

² "Generation and Interpretation of IMPLAN's Tax Impact Report", IMPLAN Group, November 2017, 3/29/2018

taxation is industry and institution specific, the distribution of tax payments between the various types of payments is the same for all industries and institutions.

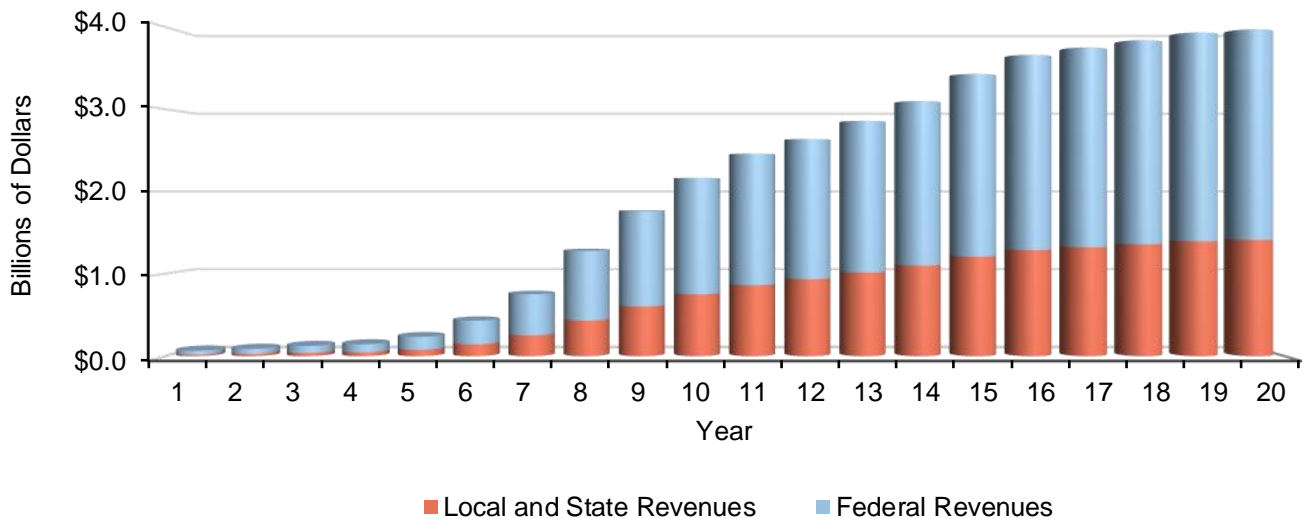
Tax impacts for this report were calculated on a national basis, for the Gulf Coast region as a whole, as well as for individual states to capture tax impacts from cross border spending flows. To estimate the cross-border tax impacts within the Gulf Coast region, additional tax impacts were proportionally allocated to the individual states based on each total state tax impacts, so that the sum of the individual state impacts equaled the Gulf Coast regional tax impact.

Additionally, for the purposes of this report tax impacts are divided into direct and indirect/induced impacts. Direct impacts are tax impacts of direct spending by the oil and natural gas industry while indirect and induced impacts are due to indirect and induced spending.

Section 3 – Federal Local, State and Federal Tax Impacts

Spending due to oil and natural gas exploration and production in the Eastern Gulf of Mexico is anticipated to lead to increased federal, local, and state tax revenues beyond direct royalties, bonuses, and rents. Total state, local, and federal tax revenues due to Eastern Gulf of Mexico oil and natural gas exploration and production activities are projected to reach over \$3.9 billion at the end of the 20-year forecast period (Figure 1), with state and local tax revenues reaching over \$1.4 billion and federal tax revenues reaching over \$2.5 billion annually. Cumulatively, total state, local, and federal tax revenues due to Eastern Gulf of Mexico oil and natural gas exploration and production activities are projected to reach over \$40.5 billion across the forecast period. Cumulative state and local additional revenues are projected at nearly \$14.3 billion. Cumulative federal revenues are projected at nearly \$26.4 billion. (Figure 1)

Figure 1: Projected Local, State and Federal Tax Revenues³ (\$Billions)

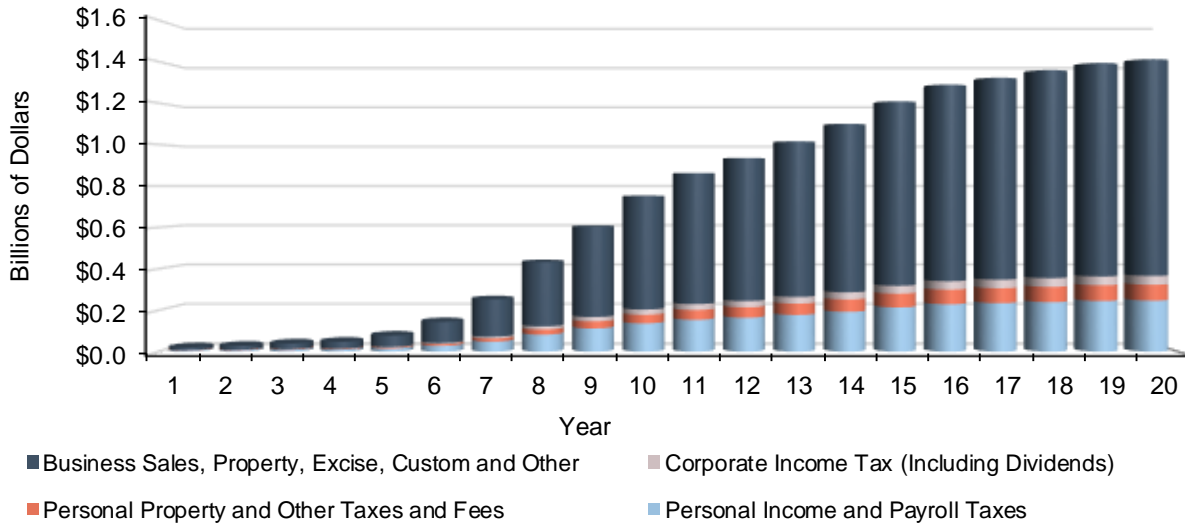


Source: Calash

State and local taxes are projected to reach over \$1.4 billion dollars per year by the end of the forecast period. The portion that is personal income and payroll taxes is projected at nearly \$250 million at the end of the forecast period. Personal property and other taxes and fees are projected to account for over \$75 million per year in additional state and local tax revenue at the end of the forecast period. Corporate income taxes (including dividends) are projected to account for nearly \$45 million of additional revenues, and business sales, property, excise, custom and other taxes are projected to account for nearly \$1.05 billion of additional state and local tax revenue. (Figure 2)

³ Excludes Royalties, Bonuses, and Rents

Figure 2: Projected State and Local Tax Revenues by Category (\$Billions)



Source: Calash

Direct spending by the oil and natural gas industry is projected to generate around \$545 million of the \$1.4 billion of additional state and local tax revenues at the end of the forecast period with the remainder due to indirect and induced spending.

Across the forecast period, cumulative additional state and local taxes due to Eastern Gulf of Mexico oil and natural gas activities are projected at nearly \$14.3 billion dollars. Cumulative personal income and payroll taxes are projected at over \$2.5 billion across the forecast period. Cumulative personal property and other taxes and fees are projected to account for around \$785 million of additional state and local tax revenue at the end of the forecast period. Corporate income taxes (including dividends) are projected to account for over \$450 million of cumulative additional revenues, and business sales, property, excise, custom and other taxes are projected to account for over \$10.5 billion of cumulative additional state and local tax revenue. Direct spending by the oil and natural gas industry is projected to account for over \$5 billion of cumulative additional tax revenue with the remainder due to indirect and induced spending.

Due to the projected location of the potential oil and natural gas industry spending, Louisiana, Texas, Florida, and Alabama are likely to receive the largest additional local and state tax revenues. These states are projected to receive around a cumulative \$1.5 billion, \$3.6 billion, \$2 billion and \$875 million respectively across the forecast period. Mississippi is projected to receive cumulative new state and local tax revenues of nearly \$580 million. (Table 4)

Table 4: Projected Additional Local and State Tax Revenues by State (\$Millions)

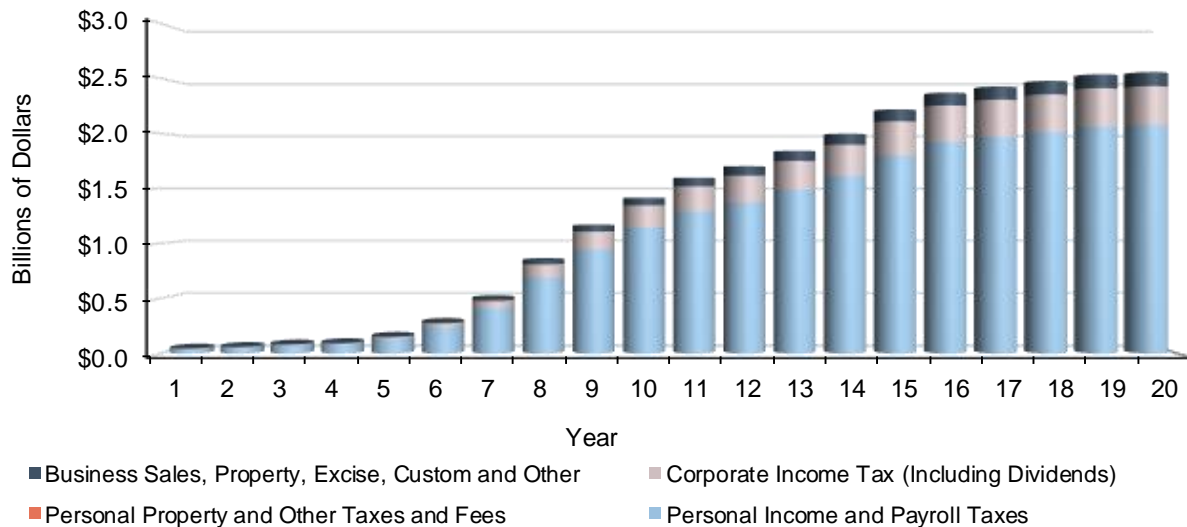
State	1	2	3	4	5	6	7	8	9	10	10 Year Cumulative
Louisiana	\$3	\$4	\$6	\$7	\$9	\$13	\$21	\$35	\$52	\$70	\$219
Texas	\$6	\$9	\$12	\$16	\$25	\$46	\$81	\$138	\$187	\$227	\$748
Florida	\$1	\$2	\$2	\$3	\$5	\$10	\$20	\$36	\$55	\$74	\$208
Alabama	\$1	\$1	\$2	\$3	\$3	\$6	\$10	\$17	\$27	\$38	\$107
Mississippi	\$0	\$1	\$1	\$2	\$2	\$4	\$7	\$12	\$19	\$26	\$75
Gulf Coast States Total	\$11	\$16	\$24	\$29	\$45	\$80	\$139	\$238	\$340	\$435	\$1,357
Other US States	\$9	\$11	\$16	\$18	\$33	\$65	\$115	\$195	\$264	\$317	\$1,043
Total	\$20	\$28	\$39	\$48	\$78	\$145	\$254	\$433	\$604	\$752	\$2,400

State	11	12	13	14	15	16	17	18	19	20	20 Year Cumulative
Louisiana	\$84	\$100	\$114	\$123	\$132	\$141	\$144	\$153	\$161	\$166	\$1,538
Texas	\$252	\$258	\$270	\$286	\$308	\$318	\$314	\$304	\$307	\$307	\$3,673
Florida	\$95	\$113	\$133	\$151	\$174	\$192	\$215	\$241	\$252	\$256	\$2,029
Alabama	\$48	\$59	\$66	\$70	\$74	\$82	\$87	\$92	\$96	\$98	\$878
Mississippi	\$35	\$40	\$45	\$48	\$50	\$53	\$55	\$57	\$59	\$61	\$579
Gulf Coast States Total	\$515	\$571	\$627	\$677	\$739	\$786	\$815	\$848	\$875	\$888	\$8,697
Other US States	\$347	\$364	\$388	\$423	\$470	\$503	\$507	\$511	\$519	\$524	\$5,598
Total	\$862	\$935	\$1,015	\$1,100	\$1,208	\$1,289	\$1,322	\$1,359	\$1,393	\$1,411	\$14,295

Source: Calash

In addition to local and state taxes, the federal government is projected to receive large additional revenues due to Eastern Gulf of Mexico offshore oil and natural gas activities (in addition to the royalties, bonus bids and lease payments excluded from this study). Additional federal taxes due to Eastern Gulf of Mexico oil and natural gas activities are projected to reach over \$2.5 billion dollars per year by the end of the forecast period, with the highest revenues from personal income and payroll taxes at over \$2 billion per year. Corporate income taxes (including dividends) are projected to account for over \$350 million of additional revenues, while business sales, property, excise, custom and other taxes are projected at over \$125 million. (Figure 3)

Figure 3: Projected Federal Tax Revenues by Category (\$Billions)



Source: Calash

Direct spending by the oil and natural gas industry is projected to account for nearly \$1.1 billion of additional federal tax revenue at the end of the forecast period with the remainder due to indirect and induced spending.

Across the forecast period, cumulative additional federal taxes due to Eastern Gulf of Mexico oil and natural gas activities are projected at over \$26 billion dollars, with the highest revenues from personal income and payroll taxes at over \$21 billion cumulatively. Corporate income taxes (including dividends) are projected to account for nearly \$3.7 billion of cumulative additional revenues. Business sales, property, excise, custom and other taxes are projected at nearly \$1.3 billion of cumulative additional revenues across the forecast period. Direct spending is projected to account for over \$10.5 billion of cumulative additional tax revenue with the remainder due to indirect and induced spending.

Section 4 – Conclusions

- The opening of the Eastern Gulf of Mexico to oil and natural gas exploration and development is projected to lead to significant increases in state and local tax revenues. Combined additional state, local and federal taxes at the end of the forecast period are projected at nearly \$4 billion. Cumulative additional state, local, and federal taxes across the 20 year forecast period are projected at over \$40.5 billion.
- Total state and local tax revenues are projected to be over \$1.4 billion per year by the end of the forecast period, with around \$545 million of the impact in that year expected due to direct spending by the oil and natural gas industry and the remainder due to indirect and induced spending. Cumulatively across the 20 year forecast period additional state and local tax revenues are projected at nearly \$14.3 billion, of which over \$5 billion is due to direct spending by the oil and natural gas industry and with remainder due to indirect and induced spending.
- Total additional federal tax revenues are projected to be over \$2.5 billion per year by the end of the forecast period, with nearly \$1.1 billion of the impact in that year expected due to direct spending by the oil and natural gas industry and the remainder due to indirect and induced spending. Cumulatively across the 20 year forecast period, additional federal tax revenues are projected at over \$26.3 billion, of which over \$10.5 billion is projected to be due to direct spending by the oil and natural gas industry, with the remainder due to indirect and induced spending.

Section 5 – State Results Appendix

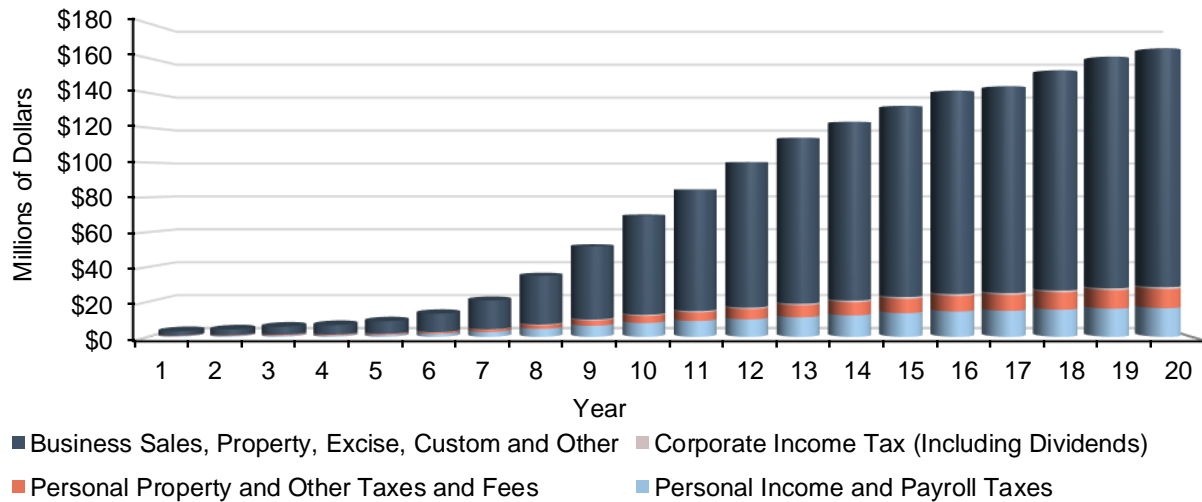
5.1 States Results

While the opening of the Eastern Gulf of Mexico for oil and natural gas production activities is expected to benefit both the states that border the Gulf of Mexico as well as other U.S. states and the federal government, the state and local tax benefits of projected exploration and development activity are expected to accrue most significantly within the Gulf Coast region. If exploration and production of oil and natural gas in U.S. Eastern Gulf of Mexico waters were to be allowed, each of the states on the coast are projected to see significant increases in state and local revenues due to capital and operational spending from the oil and gas industry. Within the region, the distribution of the benefits is also expected to be diverse with certain states expected to accrue greater benefits due to differing in state spending levels.

5.2 Louisiana

Louisiana is projected to see the highest levels of spending and the second highest state and local tax revenues, with revenues reaching around \$165 million by the end of the forecast period. (Figure 4 and Table 5)

Figure 4: Louisiana State and Local Tax Revenues by Category (\$Millions)



Source: Calash

Table 5: Louisiana State and Local Tax Revenues by Category (\$Millions)

Year	5	10	15	20	Cumulative
Personal Income and Payroll Taxes	\$1	\$8	\$14	\$16	\$160
Personal Property and Other Taxes and Fees	\$1	\$4	\$8	\$11	\$96
Corporate Income Tax (Including Dividends)	\$0	\$1	\$1	\$1	\$13
Business Sales, Property, Excise, Custom and Other	\$7	\$57	\$110	\$137	\$1,269
Total	\$9	\$70	\$132	\$166	\$1,538

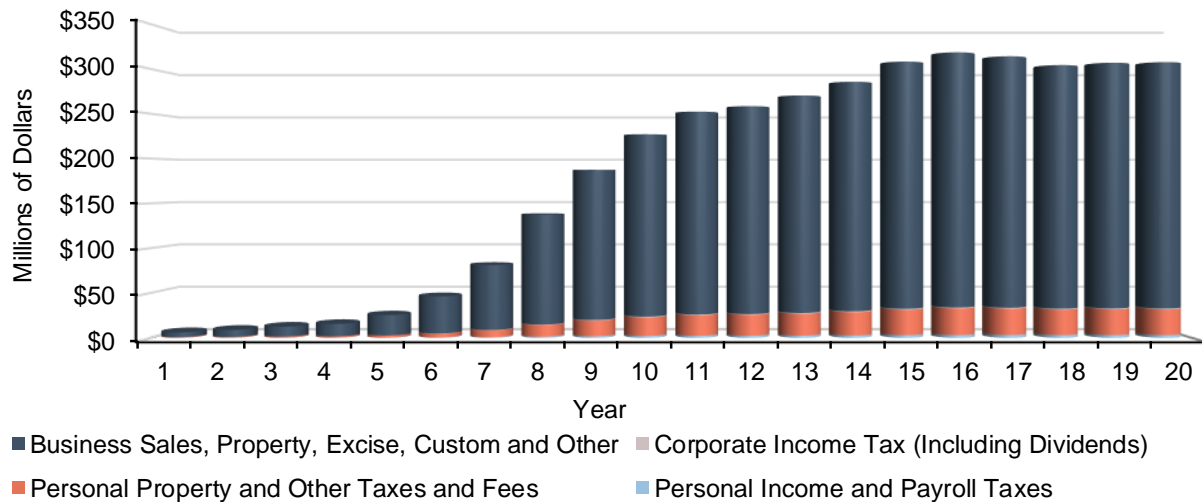
Source: Calash

Cumulative state and local tax revenues due to spending are projected at over \$1.5 billion across the 20 year forecast period.

5.3 Texas

Texas is projected to see the second highest levels of spending and the highest state and local tax revenues, with revenues reaching around \$305 million by the end of the forecast period. (Figure 5 and Table 6)

Figure 5: Texas State and Local Tax Revenues by Category (\$Millions)



Source: Calash

Table 6: Texas State and Local Tax Revenues by Category (\$Millions)

Year	5	10	15	20	Cumulative
Personal Income and Payroll Taxes	\$0	\$2	\$3	\$3	\$35
Personal Property and Other Taxes and Fees	\$2	\$21	\$28	\$29	\$340
Corporate Income Tax (Including Dividends)	\$0	\$1	\$1	\$1	\$13
Business Sales, Property, Excise, Custom and Other	\$23	\$203	\$276	\$275	\$3,285
Total	\$25	\$227	\$308	\$307	\$3,673

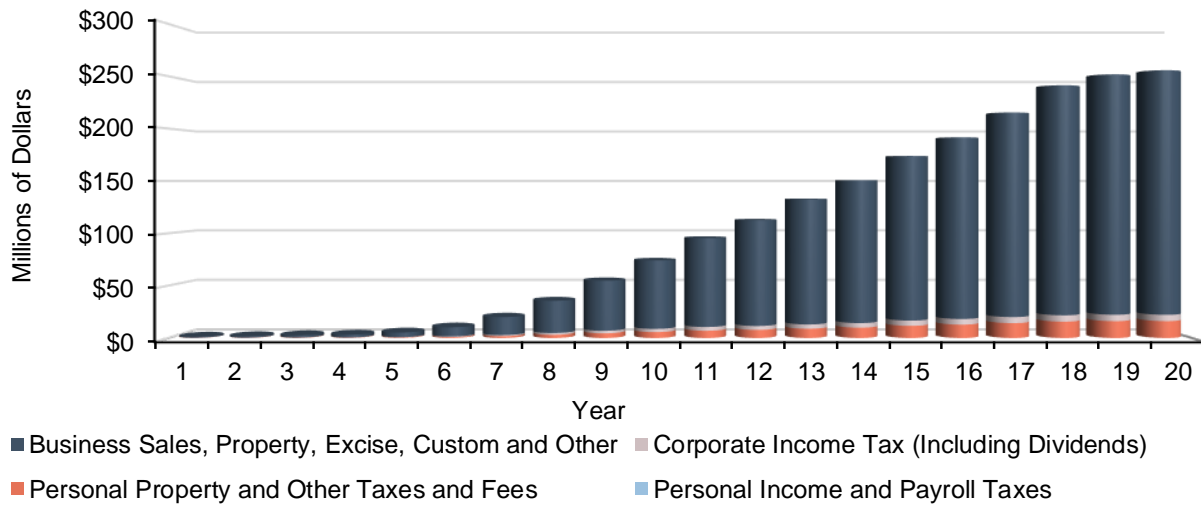
Source: Calash

Cumulative state and local tax revenues due to spending are projected at nearly \$3.7 billion across the 20 year forecast period.

5.4 Florida

Florida is projected to see the third highest levels of spending and thus state and local tax revenues, with revenues reaching around \$255 million by the end of the forecast period. (Figure 6 and Table 7)

Figure 6: Florida State and Local Tax Revenues by Category (\$Millions)



Source: Calash

Table 7: Florida State and Local Tax Revenues by Category (\$Millions)

Year	5	10	15	20	Cumulative
Personal Income and Payroll Taxes	\$0	\$0	\$0	\$0	\$0
Personal Property and Other Taxes and Fees	\$0	\$6	\$12	\$16	\$137
Corporate Income Tax (Including Dividends)	\$0	\$3	\$5	\$6	\$59
Business Sales, Property, Excise, Custom and Other	\$5	\$65	\$157	\$234	\$1,833
Total	\$5	\$74	\$174	\$256	\$2,029

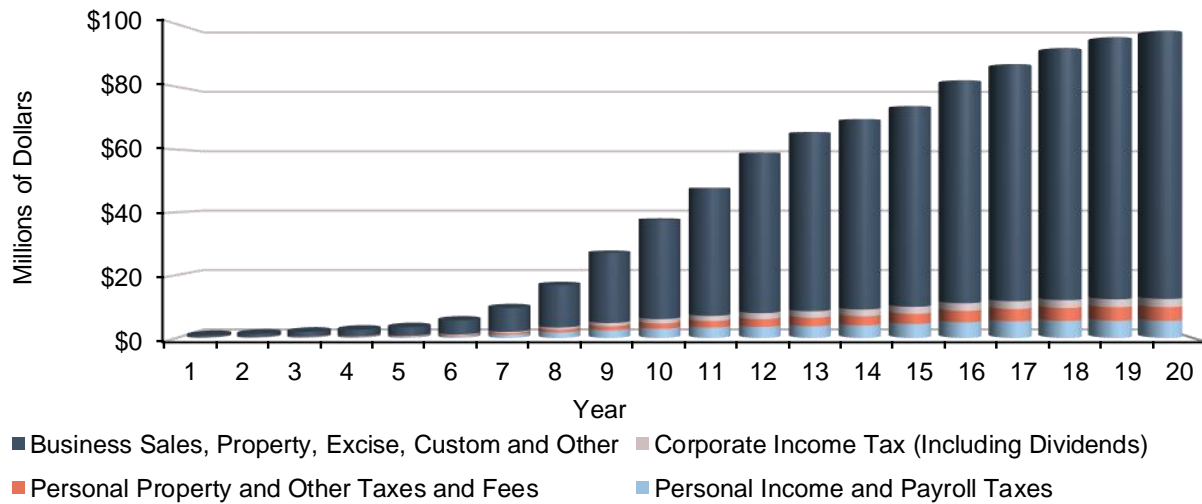
Source: Calash

Cumulative state and local tax revenues due to spending are projected at over \$2 billion across the 20 year forecast period.

5.5 Alabama

Alabama is projected to see the fourth highest levels of spending and thus state and local tax revenues, with revenues reaching nearly \$100 million by the end of the forecast period. (Figure 7 and Table 8)

Figure 7: Alabama State and Local Tax Revenues by Category (\$Millions)



Source: Calash

Table 8: Alabama State and Local Tax Revenues by Category (\$Millions)

Year	5	10	15	20	Cumulative
Personal Income and Payroll Taxes	\$0	\$3	\$4	\$5	\$55
Personal Property and Other Taxes and Fees	\$0	\$2	\$3	\$4	\$40
Corporate Income Tax (Including Dividends)	\$0	\$1	\$2	\$3	\$26
Business Sales, Property, Excise, Custom and Other	\$3	\$32	\$64	\$85	\$757
Total	\$3	\$38	\$74	\$98	\$878

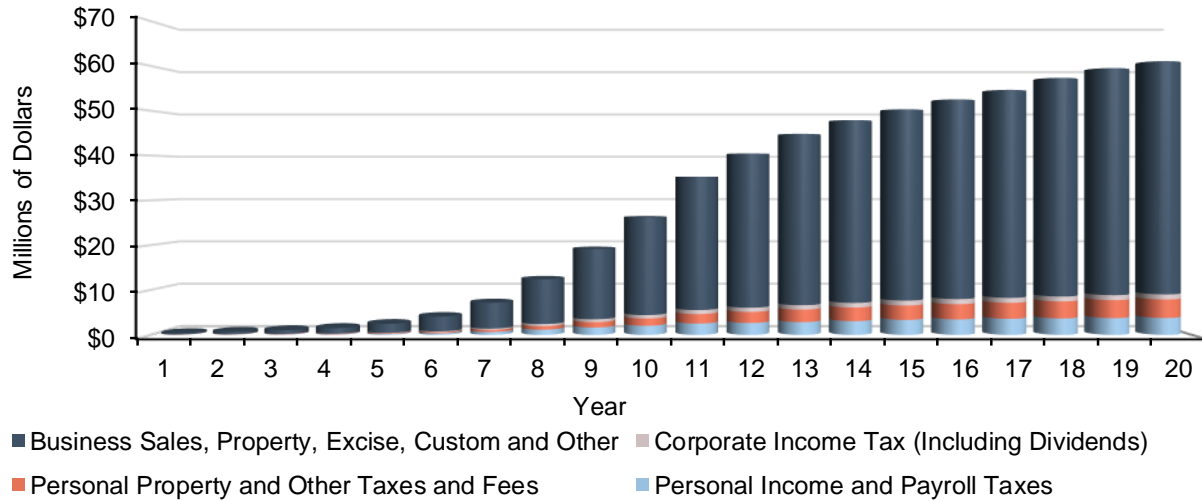
Source: Calash

Cumulative state and local tax revenues due to spending are projected at nearly \$880 million across the 20 year forecast period.

5.6 Mississippi

Mississippi is projected to receive state and local tax revenues reaching over \$60 million by the end of the forecast period. (Figure 8 and Table 9)

Figure 8: Mississippi State and Local Tax Revenues by Category (\$Millions)



Source: Calash

Table 9: Mississippi State and Local Tax Revenues by Category (\$Millions)

Year	5	10	15	20	Cumulative
Personal Income and Payroll Taxes	\$0	\$2	\$3	\$4	\$39
Personal Property and Other Taxes and Fees	\$0	\$2	\$3	\$4	\$37
Corporate Income Tax (Including Dividends)	\$0	\$1	\$1	\$1	\$13
Business Sales, Property, Excise, Custom and Other	\$2	\$22	\$43	\$52	\$490
Total	\$2	\$26	\$50	\$61	\$579

Source: Calash

Cumulative state and local tax revenues due to spending are projected at nearly \$580 million across the 20 year forecast period.



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