

Summary of Terms

Consultant Services Agreement by and between BLR and Moody's Analytics, Inc.

Scope of Work:

- *See attached* Moody's Analytics "Final Scope of Work"
- Research, analysis, and reporting regarding economic and revenue impacts of:
 1. COVID Stimulus on Arkansas' economy and tax revenues, to include creation of revenue models; and
 2. Select Personal Income Tax Changes, to include dynamic scoring;
- Provision of written reports of results, key findings, and recommendations no later than September 30, 2021; and
- Presentation of results and key findings to a legislative committee designated by the Speaker of the House and the President Pro Tempore of the Senate.

Price and Invoicing:

- Maximum Contract Amount -- \$288,000 (includes travel expenses)
- BLR will be invoiced half (\$144,000) upon execution of the contract and the other half (\$144,000) upon provision of the reports but prior to presentation to a legislative committee.

Important Dates:

- Contract Term – July 23, 2021 through December 31, 2021
- Reporting on both research topics due no later than September 30, 2021

Final Scope of Work:

- Economic and Revenue Impacts of COVID Stimulus
- Economic and Revenue Impacts of Select Personal Income Tax Changes

July 2021

Draft Scope of Work

This document is intended to summarize the scope of a potential partnership between Moody's Analytics and the Arkansas Bureau of Legislative Research in answering two distinct research questions.

1. How much has the federal COVID stimulus impacted Arkansas' economy and tax revenues?
2. How much would specific changes to the Arkansas personal income tax rate structure have on the state's economy and revenues?

COVID Stimulus Impacts

Using one-time monies to support recurring spending can lead to painful future policy decisions. This makes it imperative to understand how much of the state's economic successes over the past year and a half are attributable to temporary aid from the federal government.

Fortunately, performing this kind of analysis is something that Moody's has substantial experience with, particularly in identifying how different economic scenarios generate different revenue outcomes. Such an analysis can generally be broken down into three steps.

Step One – Economic Scenario Construction: The first step in examining the impacts of a specific economic shock is to identify and define what the assumptions behind those scenarios are. In the case of federal COVID aid this involves measuring how much federal money has flowed into Arkansas as a direct result of the pandemic.

Federal sources provide detail as to how much temporary federal money has gone into the state's economy since the beginning of the pandemic in early 2020. Using this reporting we can attempt to back out the impacts of those funds, creating a non-stimulus baseline to compare against.

Similarly, we can construct a non-pandemic baseline to see how much the Arkansas economy would have grown if pre-COVID trends would have continued unabated. A comparison of these three economic scenarios would shine helpful light on how quickly the state's recurring tax base can be expected to expand over the coming years.

Step Two – Revenue Scenario Construction: The next step would be to translate those economic scenarios into revenue forecasts. This step could be completed by Moody's alone, developing its own revenue models based on historical data, or in conjunction with legislative staff using their existing revenue equations used as part of the standard revenue forecasting process.

Adding this dimension provides context around the true budget implications of the federal COVID stimulus, and helps to identify what future tax collections would be under a variety of economic assumptions.

Step Three – Presentation of Results and Key Findings: Moody's would then summarize the findings from each of these steps into a comprehensive written report, complete with charts, tables, and necessary underlying data. This document would provide estimates as to how much of the state's economic and revenue successes since the start of the pandemic have been attributable to federal aid.

Additionally, it would provide a forward looking forecast of the state's recurring tax base. The term of such a forecast is typically 10-years, but could be expanded to as long as 30-years depending on the state's requirements.

The report would be generated in partnership with the Bureau of Legislative Research to make sure that sufficient material is provided to inform policymakers concerning future spending and revenue decisions. Moody's would also be willing to present the findings of this report virtually or in-person.

Estimating Personal Income Tax Changes

Building off of what the state's recurring tax base looks like over the next decade or more, Moody's also has the ability to partner with legislative staff to estimate the economic and revenue impacts of potential tax changes. Answering these types of research questions are typically best served by close collaboration between Moody's and legislative staff.

Step One – Assumptions and Static Scoring: The first step in the process would be identifying precisely which statutory changes should be examined. Moody's would rely on proposals provided by legislative staff based on actual policymaker proposals and input.

Moody's would then work with legislative staff to develop static revenue scores for the various proposals based upon current and proposed rate tables, historical income distributions, a baseline economic outlook, and various other sources of information as necessary.

These scores are typically provided over a 10-year period, but could be expanded to as long as 30-years depending on the state's requirements. These static scores would assume no economic feedback as a result of their being implemented, but provide a helpful starting point as to the budgetary impacts of specific proposals.

Step Two – Economic Scenario Construction: Once the potential tax changes have been identified and static revenue scores estimated, the different change scenarios can be run through Moody's proprietary economic models. These model runs will result in time-series economic scenarios that provide insight into the economic costs or benefits of implementing such policies. This includes direct, indirect, and induced effects on employment, income, and overall economic activity.

Step Three – Dynamic Revenue Scoring: The economic scenarios developed in step three would then allow us to develop dynamic revenue forecasts, incorporating feedback from the policy changes themselves into the outlook. This is an optional step, as the static estimates developed in step-one can often prove sufficient to examining the budgetary impacts of a policy change. However, particularly for revenue changes, looking at the overall impacts on a dynamic basis can provide a more accurate picture of how a specific policy will impact the state.

Step Four – Presentation of Results and Key Findings: Moody's would then summarize the economic and revenue impacts of each proposed tax change into a comprehensive written report, complete with charts, tables, and necessary underlying data. The report would be generated in partnership with the Bureau of Legislative Research to make sure that it provides sufficient material to inform policymakers questions concerning future spending and revenue decisions. Moody's would also be willing to present the findings virtually or in person.

About Moody's Analytics

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