

VERMONT EMPLOYMENT GROWTH INCENTIVE COST-BENEFIT MODELING APPROVAL CRITERION

As part of the approval process for the Vermont Employment Growth Incentive program, the Vermont Economic Progress Council must find for each application and project, that:

- The total estimated incremental tax revenues from all sources generated to the State by the proposed economic activity exceeds the revenue costs of the activity to the State, including the cost of the incentive;
- The host municipality welcomes the new business;
- The proposed economic activity conforms to applicable town and regional plans;
- If the business proposes to expand within a limited local market, an incentive would not give the business an unfair competitive advantage over other Vermont businesses in the same or similar line of business and in the same limited local market; and
- But for the incentive, the proposed economic activity:
 - (A) would not occur; or
 - (B) would occur in a significantly different manner that is significantly less desirable to the State.

Statutory Citation: 32 VSA Chapter 105, Subchapter 2, Section 3332(b):

(b) Mandatory criteria. The Council shall not approve an application unless it finds:

(1) Except as otherwise provided for an enhanced incentive for a business in a qualifying labor market area under section 3334 of this title, the new revenue the proposed activity generates to the State exceeds the costs of the activity to the State.

(2) The host municipality welcomes the new business.

(3) The proposed economic activity conforms to applicable town and regional plans.

(4) If the business proposes to expand within a limited local market, an incentive would not give the business an unfair competitive advantage over other Vermont businesses in the same or similar line of business and in the same limited local market.

(5) But for the incentive, the proposed economic activity:

(A) would not occur; or

(B) would occur in a significantly different manner that is significantly less desirable to the State.

Why is this part of the program?

The revenue costs and revenue benefits to the state must be determined: Statute requires that the Council determine the fiscal benefits and costs to the state of the proposed economic activity. To determine the fiscal benefits and costs, an economic input-output model is used to determine the economic impacts of the proposed economic activity, including the multiplier and indirect impacts of the proposed activity. The model then calculates the annual revenue benefits and the revenue costs based on the overall economic impact. The difference between the total revenue benefits and the total revenue costs, after accounting for the present value, is the net revenue (fiscal) benefit or cost to the state.

Background growth cannot be included in the approved incentive: The purpose of this program is to provide an incentive for economic activity that would not occur except for the incentive and for activity which is above and beyond activity that would normally occur or would occur anyway. The “But For” criterion ensures the former. Accounting for “background” or “organic” growth ensures the latter. Even economic activity that is occurring because of an incentive includes some activity that would have occurred as the natural business growth of a company. One purpose of the cost-benefit model is to measure and account for the background growth and exclude it from the incentive calculation.

How does the cost-benefit model work?

To perform this evaluation, the Vermont Economic Progress Council utilizes a cost-benefit model that was developed by a Vermont economist in conjunction with the General Assembly’s Joint Fiscal Office. The model was approved by the Joint Fiscal Committee and, in accordance with statute, any changes or updates to the model are submitted to the Joint Fiscal Committee of the General Assembly for approval.

The cost-benefit model includes three key components: 1) Initial input; 2) Economic and Input-Output; and 3) Fiscal Impact.

1. The cost-benefit evaluation begins with a thorough review of a completed VEGI application. The analysis considers applicant-specific information such as location of the project, project development schedule, the business’ industrial category or sector, and the projected incremental expenditures associated with the project, including investments in plant and equipment, incremental payroll and employment levels. The output from these input calculations essentially translates the applicant’s projected incremental activity associated with the incentives into data variables that are meaningful to the economic Input-Output component of the model.
2. The economic input-output component of the cost-benefit model is used to calculate the total economic and demographic changes associated with the applicant’s projected project. In its most elemental form, this component calculates and reports the total changes in economic activity that the project can be expected to produce if the applicant completes its proposed project as planned. These calculated and reported changes in economic activity include: total employment; change in total personal income; change in total population; change in total population by age; and change in total personal consumption. These data are then used for calculations in the third component of the model.
3. The third component of the model involves estimating the impact on total state costs - as measured in foregone state tax revenues and increased public expenditures - and comparing them to the expected increase in all state tax revenues flowing from the additional economic activity anticipated from the proposed project’s implementation. Future benefits and costs are then discounted to “present value” as of the year of application. Total costs over the impact assessment period are expressed as a net total for the year in which the incentive application is reviewed. The present value revenue benefits less the present value revenue costs produce the net revenue benefit to the state, which is the starting point for the [VEGI incentive calculation](#).

Several economic modeling software exist that could be used for the second component of the VEGI cost-benefit model, the economic input-output component. The software that is currently utilized was developed by Regional Economic Modeling, Inc. (REMI) of Amherst, Massachusetts. That is why people erroneously refer to the VEGI cost-benefit model as the “REMI” model. Although the REMI software is utilized for part of the model, it is not the whole model.

How will the cost-benefit modeling be conducted?

The following program principles and rules will be followed in the cost-benefit model procedure:

1. "Net fiscal benefit" means the excess of the present value benefit to the state over the present value cost to the state as calculated by the cost-benefit model.
2. The model process, including the acquisition of relevant data and data entry, will be operated in a uniform manner for each application using a comprehensive methodology to assess and measure the projected annual fiscal costs and benefits and the net present value of the fiscal benefit or cost to the state.
3. The model process will utilize only data provided by the applicant business on the forms provided by VEPC for this purpose. The applicant may not substitute alternate forms or data presentations and data will not be accepted from other sources or be filled in by VEPC staff.
4. The model process will utilize up to five consecutive calendar years of economic activity that will occur because of the incentive to calculate an incentive to be earned for up to five consecutive calendar years. An applicant may project incremental activity for a minimum of one year and a maximum of five years. Regardless of the number of years of incremental growth indicated by an applicant, the modeling will measure the impact of the activity over five years.
5. Year 0 (Zero) shall be the base year and is the year prior to the calendar year in which the economic activity for which an incentive is sought will commence. If the application is filed in Year 0, the model will include only the activity that will occur during the five consecutive calendar years beginning on the [Activity Commencement Date](#) in the calendar year following Year 0. Any economic activity that occurs between the date of application and the Activity Commencement Date will not be included in the model. If the application is filed during the calendar year in which the economic activity for which an incentive is sought will commence, that will be considered Year 1 and the previous calendar year will be considered the base year, “Year 0.” No economic activity that occurs prior to the Activity Commencement Date entered on the application will be included in the model.
6. Job and business retention are not part of the VEGI incentive program design and purpose. All projects will be treated the same under the cost-benefit model with incentive calculations based only on incremental economic activity; that is, only activity that will occur because of the incentive sought, and activity that has been adjusted to account for background growth.
7. The first year of economic activity of start-up applicants and applicants being recruited to Vermont will be considered incremental. Base employment and payroll will be considered to be “0” (zero). However, the qualifying payroll for the first year and subsequent years will be adjusted for background growth based on the first year full-time payroll.
8. An application that represents a plant closing scenario will be considered the same as a start-up. An application will be considered under a “plant closing scenario” only if:
 - a. The facility, plant, or business operation that is the subject of the application has ceased

- operations prior to the date of application and terminated all employment and the applicant business will restart the plant or business, and the applicant business entity is in no way related to the entity that operated the plant prior to closing; or
- b. The facility, plant, or business operation that is the subject of the application will cease to operate and terminate employment, and the applicant business will restart the plant or business, and the applicant business entity is in no way related to the entity that currently operates the plant or business.
 - c. The applicant entity must submit a letter from the entity that currently operates the plant stating, unequivocally, that unless the applicant business purchases or otherwise acquires the business, it will cease to operate.
9. The model process will include the consideration of the effect of the passage of time, inflation, and estimated adjustments to taxation and other factors in the calculation of the value of the annual benefits and costs of the economic activity modeled.
10. The model will utilize a rate of adjustment to calculate the present value of the net of the benefit stream and the cost stream as of the date of application. The rate will be the total of the General Obligation Bond Rate for the State of Vermont from the most recent General Obligation Bond sale as of January 1 of the year of application, plus a [Regional Differential Adjustment Rate](#). The Regional Differential Adjustment rate will provide an adjustment to the GO Bond Rate in order to provide a preference through a higher authorization value for projects occurring in economically underperforming regions of the state. For purposes of the Regional Differential Adjustment, there are three regions. The Regional Differential Adjustment Rate is “+1.0” for counties in Region 1 (economically underperforming areas), “+0.0” for counties in Region 2 (neutral; performing around state average), and “-1.0” for counties in Region 3 (performing above state average). The economic data to determine the regions (including population, unemployment, employment, the change in total household employment, manufacturing employment, agricultural employment, and personal income) are reviewed and updated if economic conditions require. Click here to view the current [Regional Differential Adjustment](#) county groupings for the current calendar year.
11. The model will calculate the costs and benefits, both direct and indirect, generated by the applicant’s project utilizing the dollar value of the *capital investments* represented in the application and will assume that all capital investments included in the model will occur because of the authorization of the incentive sought, as follows:
- a. The costs and benefits generated by the investment will depend on the type of investment being made and the actual fiscal impact of that type of investment, including the percentage of the investment that will occur within Vermont.
 - b. A regional coefficient determined by historical data of industry averages is used to model the percentage of the capital investments that will actually occur within Vermont and impact Vermont revenues. If the applicant provides evidence that higher than industry average expenditures will occur in-state, then the percentage provided by the applicant will be used to override the model’s regional coefficient.
 - c. Although all capital investments that will occur because of the incentive must be included on the application forms, only capital investments that have an economic impact will be included in the model and only these investments will result in a capital investment performance requirement being set for the year the investment is made. For modeling purposes, the capital investments that have an economic impact include: new construction, renovations or fit-up of owned, acquired or leased facilities, and the percentage of any new

machinery and equipment purchased in Vermont (including installation costs). For the purposes of the cost-benefit model, the types of capital investments that do not have an economic impact include: land purchases, the acquisition of existing plants and facilities and machinery and equipment already existing within Vermont, the purchase of used machinery and equipment from within Vermont, and any land, plants and facilities, and machinery and equipment that are leased or rented.

12. The model will calculate the costs and benefits, both direct and indirect, generated by the applicant's project utilizing only the *number of new qualifying jobs added each year and the increases in payroll for the qualifying jobs* and will assume the qualifying jobs and payroll included in the application will be added because of the authorization of the incentive sought. In addition, the model will account for the level of background growth in qualifying payroll that would occur anyway and the incentive will be based on the new qualifying payroll, less background growth.
13. The background growth rates will be determined according to the following rules:
 - a. The [rate schedule](#) will be determined annually using a statewide, 15-year average rate of change, by NAICS sector, at the 2- and 3- digit level. The historic 15-year annual average rate of change will include the last complete business cycle.
 - b. The rate for each applicant will be determined using the North American Industrial Classification System (NAICS) code for the economic activity planned to occur in Vermont because of the incentive, at the 3-digit level, if available, as follows:
 - i. If at the 3-digit level for the applicant's sector, the historical growth rate is **not** greater than 1.5 times the historical growth rate for all private industries, then the background growth rate will be the historical growth rate for the applicant's sector at the 3-digit level.
 - ii. If at the 3-digit level, the historical growth rate for the applicant's sector is greater than 1.5 times the historical growth rate for the all private industries, then the background growth rate will be the **greater** of the appropriate 2-digit NAICS code for the applicant's industry **or** the historical growth rate for the applicant's industry, not to exceed 1.5 times the private sector average.
 - iii. If the historical data for the appropriate 3-digit NAICS code is not available, then the appropriate 2-digit NAICS code will be selected.
 - c. For existing Vermont businesses, the background growth rate is applied to the base year payroll, which consists of all full-time, non-owner Medicare wages and salaries in Year 0 (qualifying and non-qualifying), and is compounded over the five year incentive period. For businesses starting up in Vermont (including both new businesses and businesses new to Vermont), background growth is calculated utilizing the full-time payroll for Year 1 in the following formula: (Year 1 qualifying payroll) times (Year 1 qualifying payroll minus the applicable background growth rate). The result becomes the Year 0 or "base year" payroll and the background growth rate is applied to the base year payroll and compounded over the five year incentive period.
14. If an applicant had a reduction in the number of qualifying jobs during the 24 months prior to the date of application, only the new qualifying jobs that exceed the average full-time employment of the previous two years will be considered in the cost-benefit model. This [look back requirement](#) may be waived upon application to the Council and a determination by the Council that the business will establish a significantly different, new line of business and create new jobs in the new line of business that were not part of the enterprise prior to application.

How does the Cost-Benefit Model result impact the VEGI incentive calculation?

The cost-benefit model produces a theoretical amount of net tax revenues that will be created by the project and accrue to the State of Vermont over five years. This number is the starting point to the VEGI incentive calculation. Click here to see an example of a [VEGI incentive calculation](#). The more qualifying jobs and payroll and capital investments involved in the project, the higher the net revenue benefit to the state and the higher the incentive.

Can I get an estimated level of incentives without filing a complete application?

Yes. After discussing a project with VEPC staff, potential applicants may file an online VEGI Pre-Application, which is an abbreviated version of the full application. This is an informal process that provides an incentive estimate. It is not, however, an approval for any incentives.

Contact:

Fred Kenney

Executive Director

(802) 777-8192

fred.kenney@vermont.gov