MEMORANDUM

To: Members, Joint Fiscal Committee
From: Fred Kenney, Executive Director, VEPC
CC: Steve Klein, Joint Fiscal Office
Date: February 4, 2010
RE: Vermont Employment Growth Incentive Cost-Benefit Model Update

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The Vermont Economic Progress Council is responsible for implementing the application and authorization portion of the Vermont Employment Growth Incentive program. As part of the application review process, the Council applies a cost-benefit model to determine how a project will economically and fiscally impact the State of Vermont. The model was developed by and is currently implemented by Economic & Policy Resources, Inc. (EPRI), through a State of Vermont contract agreement. The initial development and utilization of, subsequent annual updates to, and any modifications to, the cost-benefit model have been presented to and approved by the Joint Fiscal Committee, as required by statute.

Recently, EPRI prepared and submitted to VEPC a memo outlining the annual model updates that were performed to ensure appropriate consideration of VEGI applications in calendar 2010. In accordance with 32 V.S.A. §5930a(d), VEPC hereby provides notice to the Joint Fiscal Committee of the annual updates to the model that were completed for calendar 2010. No modifications were made to existing model elements. Only updates to economic, fiscal and demographic data, as follows:

- To reflect changes in the economy that affect the calculations of the costs and benefits of an application;
- To reflect changes in tax statute and rates that affect the calculations of the costs and benefits of an application; and
- To reflect changes to the model to maintain compatibility with the latest version of the REMI Input/Output software.

At the request of the Council, a new element was added to the model and the cost-benefit reports that are provided to the Council by EPRI. Title 32 §5930b(b)(5) provides that the Council may authorize incentives in excess of the normal incentive calculation. The aggregate of the excess of any such authorizations are limited by a cap of $1,000,000 (Act 184 (2006), §11(a)). The cap also limits authorizations of this type by labor market area as determined by economic data certified by the Vermont Department of Labor. According to the latest data certified by the department, the LMA currently excluded is Burlington/So Burlington. In addition to the statutory geographic limitation, the Council added a set of criteria that must be met for an application to be considered under this authority. The VEPC Executive Director provides the Council with data and information to determine whether the application meets the criteria. The data elements added to the model and the resulting additional page added to the cost-benefit report provides the Council with the data it needs to determine the amount that can be considered in excess of the normal incentive and indicates what the resulting net revenue benefit would be if

the determination were made to authorize an incentive in excess of the normal incentive calculation.

The attached memo from EPRI to VEPC contains details on the updates that were completed. No changes were made to the way VEGI applications are treated by the model, nor were modifications made to the model operation. One element was added to provide the Council with additional data but that change did not alter the existing current operation of the model. The primary change in the 2010 model was the annual update of key fiscal and demographic data used in the model. This is done annually to keep the cost-benefit model as close to reflecting the current economic conditions as possible.

EPR Economic & Policy Resources
Economists, Policy and Financial Analysts

Reply to: PO Box 1660
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Memo

To: Fred Kenney, Executive Director, Vermont Economic Progress Council
From: Mathew J. Barewicz and Jeffrey B. Carr
Date: February 2, 2010
Re: Annual Update: Fiscal Cost-Benefit Model

I. Background

The completion of calendar year 2009 marks the third full year of operations for the Vermont Employment Growth Incentive (VEGI). VEGI is the latest economic development incentive program overseen by the Vermont Economic Progress Council (VEPC) which has provided oversight for the state's economic development incentive programs since 1999 when the Economic Advancement Tax Incentive (EATI) program was passed by the Vermont General Assembly. The EATI program was replaced by the 2006 General Assembly with the current VEGI program. As part of the new program, a VEGI Technical Working Group – including representation from VEPC, the Legislature and the Vermont Department of Taxes – was formulated to monitor, assess, and evaluate the implementation of the new VEGI program. This process was undertaken given the implementation experience with the EATI program.

II. Purpose of Memorandum

This memo is intended to document the completion of the annual update of the VEGI model for use during calendar year 2010. As is evident by the current economic climate, annual VEGI updates continue to be important because they re-calibrate the fiscal cost-benefit model to the new economic 'normal'. Without such updates, a model like the VEGI fiscal cost-benefit model would get off-track, and could over- or under-estimate economic and fiscal impacts using growth rates and projections which reflect conditions from a different part of the economic cycle which may no longer apply. Currently, because the economic "earth" shifted so significantly beneath our feet over the last year, the new consensus long-term economic and revenue forecasts that apply to calendar year 2010 are much different than the consensus forecasts included in the VEGI fiscal cost-benefit model that were employed just 12 months ago. This annual update of the VEGI model incorporates all of the most recent consensus forecast and all of the latest fiscal information available as of February 1, 2010 (e.g. the January 2010 Legislative-Administration Consensus Revenue Forecast approved by the Vermont

Emergency Board on January 13, 2010). All the key fiscal and demographic data in the model that form the bridges needed to convert the economic impact concepts into the fiscal data used in the cost-benefit model scorekeeping have been updated.

As part of the annual update, a comprehensive regional analysis was performed to ensure appropriate classification by economic vitality for each of the 14 counties in Vermont. In addition, the methodology for calculating the average annual background growth rate by industry was reviewed and discussed with the VEGI Technical Working Group. This fosters the primary mission of the annual update by employing the most updated information and the most theoretically correct methodologies to promote the highest degree of accuracy in the cost/benefit estimates. Using updated data that reflect the changes in the economy will help assure realistic and reasonable estimates of fiscal impact for all VEGI applications. In summary, the economic, demographic, and fiscal data update process was completed in exactly the same manner as the previous annual updates of the VEGI fiscal cost-benefit model which have been completed for the both the VEGI and the EATI programs since they began back in 1999.

III: Standard Annual Model Updates

a. Firm Data Page

The basic components of the analysis are entered into this page. These basic components set the high order calibrations of the model to capture such important variables as industry classification and project location. On this page, there were three parts which required updating. The first was the base year of the model or in most cases, the year of project commencement. This variable was changed from 2009 to 2010 to reflect the current year. As a dynamic variable, this change followed through the entire model.

The second section which was reviewed for the current year was the regional differentials. As discussed above, a comprehensive regional analysis is performed each year as part of the annual update to ensure appropriate classification by economic vitality for each of the 14 counties in Vermont. This analysis was performed consistent with previous year's methodology and data sources. As a result of this analysis, the regional differentials were kept the same from the previous year since the analysis indicated there was no significant relative change between the subject counties.

The last part updated was an addition of a binary variable to track if the applicant (as determined by the project location) was eligible for an "enhanced" incentive amount under statutory regulations. This addition is discussed in greater depth in section IV of this memorandum.

b. Project Data and Modular Settings Pages:

The Project Data Page is where the specifics of the applicant's proposed project are entered. This page also contains several statistics used in the various calculations of costs and benefits found throughout the model. The Modular Settings Page is a support calculation table for some of the data which flows through to the Project Data Page. They were updated in tandem. The following is a list of the specific items updated on these pages which are consistent with all previous annual updates.

1. Property Value Inflator: The property value inflator is used in the calculation of an applicant's benefits, specifically in the calculation of Education Fund revenues. It is used as a growth measure of property values of an applicant's project in order to calculate the expected difference in education fund revenues between the growth in property values with and without the applicant's project. This figure is obtained from the most recent Consensus Forecast for Education Fund concepts of the Legislative Joint Fiscal Office and the Douglas Administration. The prior model's figures are updated with the new forecast figures. This figure is used in conjunction with the Projected Statewide Grand List Growth Rate. This figure is used as a projected measure of growth of the statewide grand list and used in the calculations of changes in property values as a background rate of growth.

2. Statewide School Tax Rate for Residential and Nonresidential Property: These metrics are used in the calculation of the revenue generated from the proposed project which will be contributed to the Education Fund based on both residential and nonresidential property improvements. The original data source for this update was the Vermont Department of Taxes (for fiscal year 2010).

3. State & Local Government Price Deflator: This figure is used in the calculation of various costs and benefits associated with an applicant's project. It is used to project the growth of the various funds' costs and revenues forward in time. This figure was obtained from the same Consensus Forecast of the Legislative Joint Fiscal Office and the Douglas Administration referred to in #1 above.

4. Estimated Per Student Grant, Estimated Special Education Per Equalized Pupil: These figures are used in the calculation of changes in education costs associated with an applicant's project. The figures are on a "per equalized pupil" basis and used in conjunction with the changes associated in school age population related to the applicant's proposed project. The data source for the near-term per pupil payment is the Vermont Department of Taxes with longer run forecast calculated exactly the same way as the

Vermont Department of Taxes does for the near-term numbers using the consensus State & Local Government Price Deflator forecast by the Legislative Joint Fiscal Office and the Administration for the forecasted years as presented in #3 above.

5. Vermont Estimated Population: As this update takes place in an inter-censual year, the figure used in this update of the cost/benefit model is the population estimates for the state of Vermont embedded in the REMI model. This figure is used when converting any of the data in the cost-benefit model into per capita figures.

6. FY General Fund Expenditures, FY Expenditures Fund Appropriations: These figures are used to calculate the changes in General Fund and Transportation Fund costs associated with the change in population related to an applicant's project in the most recent fiscal year. The figures are converted to a per capita basis and used in conjunction with the change in population associated with each applicant's project. The updated figures are obtained from the Vermont Department of Finance and Management and the Legislative Joint Fiscal Office.

7. Corporate Revenue/Nonfarm Supervisory Job: This figure is also used to estimate revenues associated with a change in employment from an applicant's project. It relates levels of corporate income tax to a per job basis. This can then be used to estimate the incremental corporate income tax associated with a change in employment related to an applicant's project. This figure is obtained from the most recent total corporate tax revenue divided by the BEA's concept of employment data (and includes both full-time and part-time jobs). The BEA employment series data is used as a predictor of future revenues in the model and is used since it is the most inclusive data on employment (e.g. including a count of the state's self-employed workers) that exists for a state where self-employed workers comprise a significant share of the state work force.

8. Per Capita Other General Fund Revenues, Per Capita Other Transportation Fund Revenues: These figures are used to capture the 'Other' category of revenues found in the General and Transportation Funds. They are converted to a per capita basis and used in conjunction with the change in population associated with an applicant's project. The updated figure is obtained from the most recent fiscal year tax revenues divided by the population.

9. State Personal Income Tax Rate, State Sales & Use Tax Rate, State Gas Tax Rate, State MVP&U Tax Rate, Background Statewide Education Property Tax Rate: These figures are used to determine part of the

forecasted revenues over the forecast impact period from the new demand from an applicant's proposed project. They are applied to the changes in consumption associated with an applicant's project to yield projected incremental tax revenues. These figures are obtained from the most recent fiscal year data available on total taxes received. These data are then applied to various REMI consumption items to complete the bridge between REMI economic output data and the state's fiscal cost-benefit concepts.

c. REMI Economic Output Page

In additional to being the recipient of the output of the REMI input/output model, there are several embedded REMI control variables which are updated as part of the annual model update. Consistent with previous year's updates, the equilibrium data from the REMI control is updated for the year of application. These variables include several consumption related variables such as overall consumption, general price indices, as well as specific price indices by consumption category.

d. Qualifying and Non-Qualifying Jobs & Wages Pages

As a result of the change in the model's base year from 2009 to 2010, the lookup function which finds the REMI input-output anticipated level of compensation by industry needed to be updated and tested to ensure accuracy accounting for the change in model years.

e. Present Value Calculations Page

This page calculates the present value of the total benefits and costs associated with a project. The updated present value discount rate was obtained from the Vermont Treasurer's Office for the state's most recent interest rate associated with the most recent sale of Vermont full-faith-and-credit General Obligation Bonds—which in this case was the 2009 General Obligation Bonds offering. The 2010 sale was still pending at the time the model was updated.

f. Background Growth Rate Lookup Page

As described above, a comprehensive evaluation of industry growth is performed by 3-digit NAICS code. Due to new information of the state of the United States business cycle as published by the National Bureau of Economic Research, it was determined by the VEGI Technical Working Group through a December 2009 email poll to maintain the same industry background growth rates as used in the 2009 model because the time period of study 1990-2007 represents two full business cycles. By using two full business cycles from trough to trough, the approach to calculating background growth by industry has been standardized and desensitized to intermediate and intermittent fluctuations in the economy attributable to

comparisons of data absent consideration of time and the nature of the business cycle.

IV: Addition to the Model

a. Enhanced Present Value Calculations Page

Per the request of the Vermont Economic Progress Council and consistent with statute, an additional calculation needed to be added to the VEGI model. Added as a stand-alone page, the 'subsection 5 enhanced' incentive amount is calculated resulting in a net neutral return to the state. The authority to consider an "enhanced" incentive amount is granted the VEPC board in 32 VSA §5930b(c)(5), but is only applicable to those applications proposing a project located in Labor Market Areas (LMAs) certified eligible by the Department of Labor. As of the date of this report, the only LMA which is excluded from a potential enhanced award amount is the Burlington-South Burlington LMA. The calculation is activated by a binary variable (as described above in section III a) based on the project location. The results of the calculation are presented in tabular form on this page as well as in a display box added at the bottom of the analysis report write up page.

Please feel free to call us at 878-0346 with any questions or comments about these updates. If Mat is not available, please feel free to speak with Jeff on these updates.