Introduction

The South Carolina Economic Developer's Association (SCEDA) Cost/Benefit model was designed by a committee of state and local economic development professionals as a tool to help economic development practitioners in the state. The group's intent was to design a model intricate enough to assist state and local officials with decisions regarding the value of economic development projects yet simple and easy to use.

The model is an Excel Spreadsheet consisting of nine worksheets: Project Description, County Variables, Summary, State Gov't., Local Gov't., Local Economy, Property Taxes, Enterprise Rates, and Multipliers. In order to complete an analysis, the user will only need to work with the first three pages: input information on the first two pages, Project Description and County Variables, then print out the Summary page. The other six worksheets contain the formulas described on this page.

The user will open the model to the Project Description page. Most of the questions and information asked for on this page deal with the very basics of the project. There are questions that relate to the tax implications of the project. The user need only possess a very basic understanding of South Carolina's tax incentive policies to complete the required information. The user model must have a value in the red cells.

Once the user has entered all the appropriate data on the Project Description page, the user will need to click on the County Variables tab at the bottom of the worksheet to enter the data needed on the County Variables page. When the user first opens the model, he/she will find that some of the data is already filled in. As is the case with the Project Description page, information must be entered in the cells marked in red. The more county specific data that is entered on this page, the more accurate and, therefore, valuable the model will be. It is strongly recommended that the user replace all the data on this page with the most recent data available on his/her county.

Once the County Variables page is complete, the user can click on the Summary tab at the bottom of the worksheet and move to the completed Summary page. Here the user will find a recapitulation of the project description and multipliers, a listing of the costs and benefits to both state and local government and the overall anticipated impact of the project on the economy. By clicking on File, Print, and then OK, or by clicking on the print icon on the toolbar, the model will print out a two-page analysis of all the costs and benefits calculated.

The following pages will take the user through the first three pages of the model and explain both what the model asks for and, based on the formulas, what it can tell you.

Page 1 - Project Description

The Project Description page is where the user will input project specific information that will ultimately be evaluated. Cells marked in red font are cells that must be answered for the Cost/Benefit Analysis to be complete. Once those cells marked in red are complete, those cells not marked in red, yet dependent on the red cells, will automatically change and function correctly. Most of these cells ask very direct, routine questions, and each cell on this page is directly related to the model's final outcome.

JTC Tier

"Jobs Tax Credit Tier" refers to the county's classification for the Jobs Tax Credit. The user must insert numbers (1 to 5) that correspond with the following table.

Distressed County	1
Least Developed	2
Under Developed	3
Moderately Developed	4
Developed	5

Once the value is inserted, the model will automatically calculate the value of the Jobs Tax Credit and the county percentage of the Job Development Credit; i.e., 100%, 85%, 70%, or 55%.

Manufacturing (yes/no)

This cell must be answered correctly in order for the Property Tax function to properly calculate the revenues expected for local government. This cell will affect both the assessment ratio and the depreciation rate. A manufacturer's depreciation rate will default to 11% annually.

SIC

If the user wishes to use an income multiplier, a value for the company's Standard Industrial Classification Code (SIC) between 20 and 99 must be inserted in cell B-6.

Project Multipliers

There is only one cells under Project Multipliers that a user must answer. The first question in the right hand column, cell E-9, asks if the user wants to use income multipliers. If the user answers "no" in cell I-9, a multiplier of 1 will automatically be used and the model will not calculate any indirect jobs from the project, nor will it calculate any impact of the payroll from indirect jobs.

If the user answer in cell I-9 is "yes", the model will select a multiplier based on the project's Standard Industrial Classification Code (SIC) asked for in cell B-6. These multipliers are based on Regional Input-Output Modeling Systems (RIMS) and modified by the South Carolina Bureau of Economic Advisors to more accurately reflect the state's

economy. They range from 2 to 2.5. If the multiplier is 2 then the model will assume that for every dollar of payroll the project brings into the state, another dollar of payroll is created elsewhere in the economy.

Investment - Construction and Investment - Machinery multipliers, 1.6 and 0.2 respectively, also come from the South Carolina Bureau of Economic Advisors and reflect the historical impact of investment in South Carolina.

Investment & Operations

There are six cells the user must properly fill in under Investment & Operations. The first four cells, "New Building Construction," "Existing Building," "Land," and "Equipment Less Pollution Control," are simply the investment parameters used in negotiations with the project.

The fifth cell, C-13, "Utilities (If Publicly Owned)", asks for the estimated Year 1 projected utility bill **if** the utilities are owned by a local government entity. For example, if a company is locating in an area served by the Orangeburg County Public Works, a user will insert the estimated amount of the first-year bill. If this cell is filled-in, it will grow annually by the inflation factor found on line 25 of the "Inputs" worksheet.

The sixth cell under Investment & Operations (C-14) is labeled "Annual estimated cost of operational supplies." If the user knows the amount of office supplies that will be purchased annually to operate the facility, it would be inserted in C-14. As is the case for all recurring costs that impact the model, the value placed in this cell will grow annually by the inflation factor on the "Inputs" worksheet.

Employment

The only information called for under the employment category is Total Employees, (cell C-18), Average Hourly Wage (C-19) and Percent New Residents (C-23). Once the user inserts direct employment for the project and the average hourly wage, the direct total payroll and the indirect payroll will be calculated. In addition, cell C-22, will calculate the total direct and indirect payroll. Both of these will be included on the summary page. Note: If the user chooses *not* to use multipliers, the values for "Total Payroll" and "Total Direct and Indirect" should be identical.

The user will notice values calculated in cells I-19 through I-21. These cells show Direct Employment, Indirect Employment, and Total Direct and Indirect Employment. Direct employment will equal the number of employees from the project already entered into cell C-18. Indirect employment is a calculation of the "spin-off" jobs. It is a result of the ripple effect the direct payroll will have on the economy. The calculation of indirect employment is indirect payroll divided by the average salary figure in cell I-14.

In the last cell under Employment, Percent new Residents (cell C-23) the user needs to insert the percentage of the facility's total employment that will relocate to the community. The state's cost/benefit model assumes ten percent of all new employees will be new residents to the state. When you receive this model, there will be a value of

ten percent in cell C-23. For a manufacturer, ten percent is probably a little higher than the norm. However for a true headquarters facility, it is probably quite a bit low. The higher this percentage, the greater the financial impact to the community.

Taxes

The user will find seven questions under Taxes that must be answered. With the exception of one, cell C-28 (Economic Impact Zone) each question relates to an incentive controlled by local government.

Cell C-26 holds the annual value of the Jobs Tax Credit based on the county's tier or designation as determined by the Department of Revenue. If cell B-4 (JTC Tier) is correct, the value shown in cell C-26 should be correct. If the value in cell C-26 is not correct, the user should check the information in cell B-4 for accuracy.

Cell C-27 asks the user if the county is designating the new facility site as a multi-county industrial park. If the user answers "yes," the value in Cell C-26 should automatically increase by $1,000. A "yes" answer will also result in a calculation of the multi-county park "split" on its impact on the property tax revenue to local government.

Economic Impact Zone (Yes, No) refers to the Economic Impact Zone Investment Tax Credit. The following counties are designated Economic Impact Zones by the Budget & Control Board.

Economic Impact Zone Counties

Aiken
Allendale
Bamberg
Barnwell
Beaufort
Berkeley
Calhoun
Charleston
Clarendon
Colleton
Dorchester
Dillon
Edgefield
Florence
Georgetown
Greenwood
Hampton
Horry
Jasper
Lexington

Marion
McCormick
Newberry
Orangeburg
Richland
Saluda
Williamsburg

Cells C-29 and C-30 refer to the Job Development Credit. These cells are based on the county's tier for Jobs Tax Credits and the average wage for the project. Therefore, if cells B-4 and C-19 are answered correctly, cells C-29 and C-30 should also be correct. If "N/A" appears in either C-26 or C-29, check cell B-4.

Cells C-31 through 35 are specific to any local property tax incentives being offered. Cells C-31 to C-33 deal specifically with the Fee-in-lieu. Has it been offered and, if so, what are the parameters the county has offered i.e., the assessment ratio and what type of millage agreement will be used?

Cells C-34 and C-35 deal exclusively with Special Source Revenue Bonds or Credits and only in their simplest form. Cell C-34 asks what percentage of revenue the county is willing to use to provide infrastructure for the project and cell C-35 asks the user to insert how long the county anticipates diverting revenue to the project.

Please note three important points regarding these three questions:

1. This model should not be used to calculate the proceeds the county could generate through the sale of a Special Source Revenue Bond. It is merely a tool to calculate the anticipated cost of using X amount of revenue for a specified number of years to pay for infrastructure associated with the model.

2. A project does not have to be under a fee-in-lieu agreement to receive Special Source financing. However if it is not under a fee-in-lieu agreement, it must be in a multi-county industrial park.

3. This model does not recognize improper use of the fee-in-lieu or special source revenue bonds and credits.

State Costs and Local Government Commitments

The user should only put values into cells C-39 to C-52 that reflect cash outlays to the project from either state or local governments. These cells should **not** reflect, in any way, on project commitments related to special source financial arrangements. To do so would be double counting local commitments.

Page 2 – County Variables

Once the Project Summary page is completed, the user must move to the County Variables page. There are 26 pieces of information asked for on this page that will directly impact the model's final product. And, while the model will return estimates of cost and benefit to the user without a value in each and every cell, in order to get the best, most complete return, each cell should be filled in correctly.

Most of the information asked for, such as county budget, population, millage, etc., requests absolute values specific to an individual county and should be relatively easy to find. Others, such as inflation factor, percentage of materials bought locally, etc., will be estimates. When you receive the model you may find some cells already filled in. These cells will likely be state averages or assumptions. If the user has more accurate data for his/her county or region, or information from the project being analyzed, it should be substituted for any values in place at the time the model is first opened.

PLEASE NOTE: Millages should be entered as 0 **.** XXX

Page 3 – Summary

The Summary page brings all the calculations done throughout the model forward into a two-page printout that presents the user with an organized snapshot of all the costs and all the benefits calculated in the model. In most cases this is the only page a user will need to print out. Here the user will find the basic project description, multipliers used, direct and indirect employment calculations, and the net costs and benefits of a project. The second page presents an item-specific break down of the all the costs and benefits of the project to state government, local government and the private sector economy in general. Each of these items is presented for Year 1 as well as the Net Present Value calculation for a 20-year period.

State Costs

For most people the cost to the state of an economic development project is usually thought of as incentives, however there are also costs that are not directly related to the project. The user will find the following costs listed on the Summary page for state government.

- Jobs Tax Credits
- Job Development Credits
- Economic Impact Zone
- Center for Accelerated Technology (CATT)

- Set Aside Fund & Other Grants
- Increased State Education Costs
- Property Tax Relief

1. Jobs Tax Credits

The model assumes that every project being assessed qualifies for Jobs Tax Credits. Furthermore, it assumes the company is able to begin using the credits in Year 3 and uses an equal portion each year for the following 15 years.

2. Job Development Credits

The calculation for Job Development Credits assumes the company begins collecting on 100% of all new employees described in the Employment section of the Project Description page in Year 3 at the wage level stated initially plus inflation for 15 years. The wage percentage and the county percentage stay the same for the entire duration of the incentive.

3. Economic Impact Zone

If the user indicates the project site is located in a county designated as an economic impact zone by the Budget and Control Board in cell C-28 of the Project Description page, the state will incur as a cost the Economic Impact Zone Credit. This cost is calculated as 3% of the company's investment in equipment spread out evenly over 10 years beginning in Year 2.

4. Center for Accelerated Technology Training (CATT)

The model assumes 100% of all employees listed on the Project Description page receive training through the states Center for Accelerated Technology Training at a cost to the state of $3,000 per employee.

5. Set Aside Fund & Other Grants

This is simply a total of all grants entered as State Costs on the Project Description page.

6. Increased State Education Costs

This is an estimate of the cost to the state of educating new children that enter the local school district. The calculation uses an estimate of the amount the state sends to local school districts, found in cell C-24 of the County Variables page. It assumes that for every two new employees moving into the area, as defined in cell C-23 of the Project Description page, one new child will be brought into the school district. This assumption is based on estimates done by the Budget & Control Board.

7. Property Tax Relief

The state provides homeowners relief from the property taxes levied by local school districts for operations. This model substitutes the Non-County Millage in cell C-13 on the County Variables page for the operating school millage. It then multiplies that millage by 0.04 and the median price for single-family homes and the number of new residents moving to the state to determine the cost to the state of this item.

State Benefits

The benefits to local government of an economic development project that are measured in this model are:

- State Revenues From Direct and Indirect Activity;
- Rural Infrastructure Fund;
- Reduction in AFDC Costs;
- Net State Benefits; and,
- Cost/Benefit Ratio.

1. State Revenues From Direct and Indirect Activity

The State Budget and Control Board's Bureau of Economic Advisors (BEA) estimates the state accrues a financial benefit of 7.5% of every dollar of direct and indirect payroll as well as direct investment and any indirect dollars generated from the facility construction.

2. Rural Infrastructure Fund

The Department of Revenue deposits the portion of the maximum Job Development Credit available to a company that is restricted by the county's development status into the Rural Infrastructure Fund.

3. Reduction in AFDC Costs

The BEA assumes that for every 10 new jobs created, one family will be removed from the roles of Aid to Families with Dependent Children.

4. Net State Benefits

Net State Benefits is the Total State Cost less Total State Benefits.

5. Cost/Benefit Ratio

The cost/benefit ratio equals the costs of the project to the state divided by the benefits of the project to 1. Therefore, for every dollar invested, the state receives a benefit of X. A positive number shows a net benefit to the state.

Local Government Costs

Economic development projects impact on local governments in many ways, including incentives, increased cost of services, and the additional burden on schools of new children brought into the local school district. The following items examined in this analysis.

- Fee-in-Lieu of Property Taxes
- Multi-County Park Split
- Special Source Revenues
- Government Services
- Education Costs
- Site Acquisition
- Site Preparation
- Site Utilities
- Special Infrastructure
- Equipment/Machinery
- Special Development Financing
- Consulting/Special Studies
- Waived Fees / Permits
- Streamlined Approvals

1. Fee-in-Lieu of Property Taxes

This is a calculation of the difference in the property taxes the company would have paid were it not under a fee-in-lieu. If the user correctly entered the information in cells C-31 through C-33 on the Project Description sheet and cells C-12 through C-14 on the County Variables page, the model will provide the user with an illustration of the potential revenues the county will forgo by entering into a fee-in-lieu (FILOT) agreement. If the user indicates a FILOT is not being offered to the company in cell

C-31 of the Project Description, there should be no value relating to the cost of the FILOT.

Please note: The model does not show a cost of the property tax abatement. It also does not calculate the abatement for non-manufacturing projects.

2. **Multi-County Park Split**

   If the user enters a "yes" in cell C-27 of the Project Description page the model will calculate a value for the portion of property tax or fee-in-lieu payments that go to the partner county for multi-county parks. In order to get the most accurate calculation, the user must enter the correct percentage in cell C-8 of the County Variables page.

3. **Special Source Revenues**

   Cells C-34 and C-35 of "Project Description" ask the user questions regarding the use of Special Source financing, the percentage the county is willing to use and the duration of the commitment. (As stated above, this model should not be used to calculate the proceeds of the sale of Special Source Revenue Bonds.) The values the user enters into cells C-34 and C-35 are applied to the anticipated property tax proceeds to calculate this cost to the county.

4. Government Services

The increase in the project's cost to county government reflects strictly the cost of service to new residents to the county. The calculation takes the cost of county services per capita, taken from cell C-6 of "County Variables," and multiplies it by the number of new residents to the county, a calculation of percentage of new residents times the number of total direct employees. As with all on-going costs and benefits, the cost of local government services increases at the rate of inflation entered into cell C-25 of County Variables.

5. Education Costs

The increase in the education cost of the project is very similar to the calculation above measuring the increase in the cost of local government. The model calculates the number of children added to the local school district by the project's direct employment. For this measure to be properly calculated, the user must correctly fill-in cell C-23 of the County Variables page.

The following values included in the Summary simply reflect absolute values entered on the Project Description page and, with the possible exception of Site Utilities, do not include any specific calculations.

6. Site Acquisition

Site Acquisition simply reflects the amount entered into cells C-44 through G-44 of "Project Description." This should only include cash grants made by the county to cover the cost of acquiring the site and should not include any funds already covered in the calculation of the Special Source Revenue Financing.

7. Site Preparation

As is the case with Site Acquisition discussed above, the cost of Site Preparation should only include cash grants made by the county to offset the cost of site preparation and should not include any funds accounted for by the Special Source Revenue Financing.

8. Site Utilities

As is the case with Site Acquisition and Site Prep discussed above, Site Utilities should only include the cost to local government of insuring the project has suitable infrastructure. Should the project require significant expansion of the processing facilities, the user should calculate the percentage of the expansion the project will use and multiply it by the total cost of the expansion to the county, excluding any grants from outside government sources that will likely pay for the majority of the expansion.

9. Special Infrastructure

Should the user enter values in the cells for special infrastructure such as roads or telecommunications, on the Project Description page, it will be reflected as a cost to the county in cell G-76 and I-76. Costs listed here should only be grants and not include any funds made available as a result of Special Source Revenue Financing.

10. Equipment/Machinery

At times counties are asked to participate in the cost of moving equipment and machinery. Cells G-77 and I-77 reflect the values inserted into the appropriate cells on the Project Description page. Costs listed here should only be grants and not include any funds made available as a result of Special Source Revenue Financing.

11. Special Development Financing

Special Development Financing reflects the any costs the county may incur to help the company with financing costs. Costs listed here should only be grants and not include any funds made available as a result of Special Source Revenue Financing.

12. Consulting/Special Studies

If the county has paid for any consulting studies on the project site, that amount should be entered into cells C-50 through G-50 of the Project Description page.

13. Waived Fees / Permits

Cells C-51 through G-51 on the Project Description page provide the user with opportunity to include the cost to the county of waived fees or monies spent by the county on permits.

14. Streamlined Approvals

Any costs input into cells C-52 through G-52 of the Project Description page will be brought forward to these cells.

Local Government Benefits

Benefits to local government primarily accrue from the project's direct property taxes, however other sources will also provide benefits to local governments. The following are the sources of revenue to local government that are examined in this model.

- Direct Property Taxes
- New Residential Prop. Taxes
- Property Taxes from New Cars

- L.O.S.T. from Construction Materials, Increase in Retail Sales and Operational Supplies
- Public Utilities

1. Direct Property Taxes

The overwhelming portion of the benefits that accrue to local governments from economic development projects come directly from the property taxes paid by the project. As the cost of the FILOT has already been calculated and shown under Local Government Costs, this item reflects the maximum revenue the county can expect to collect were the project not subject to a FILOT agreement. If the user identifies the project as a manufacturer, this calculation will be based on an abatement. If the user indicates the project is not a manufacturer, there will be no abatement.

2. New Residential Prop. Taxes

Local Governments will derive additional income from houses and dwellings occupied by employees relocating to the area. The calculations presented under New Residential Property Taxes include increased property taxes from owner occupied housing, single family rental housing, and multi-family housing. Each of these measures is dependent on information inserted into cells C-15 through C-20 of the County Variables as well as the percentage of total employment that is anticipated will move into the county. For most projects these values will not generate a great deal of income for the county.

3. Property Taxes from New Cars

The calculation of increased revenue from new automobiles is much the same as that for new residential property. It is a function of car cost (C-26 of "County Variables" page), millage and assessment ratio.

4. L.O.S.T. from Construction Materials, Increase in Retail Sales and Operational Supplies

Should a county levy additional sales tax(es) above the 5% state wide rate, the anticipated increase in revenue the county can expect will be computed in these three categories. Cell C-7 of the County Variables page allows the user to specify what amount, 0%, 1% or 2%, the county levies. Other cells on the County Variables page that must be properly completed in order to assure the most accurate calculations possible are cells C-27 and 28. Cell C-14 of "Project Description" allows the user to insert a value for the anticipated amount of purchases the project generate in the community. This number should only include the amount of office supplies and other materials not subject to the sales tax exemptions, such as raw materials, machinery and equipment and electricity.

5. Public Utilities

Public utilities refers only to those benefits that are owned by local governments. If the user inserts a value into cell C-13 of the Project Description page, the model will return values in cells G-94 and I-94 of the Summary page.

6. Net Local Benefits

If the project has a net positive benefit, cells G-97 and I-97 will be positive. If the county provides the company with grants to help with first-year costs, it is entirely likely the project will have a net loss in Year 1. In most cases, local users base their decisions on the 20-year Net Present Value of benefits.

Local Economy Benefits

Benefits to the local economy include all the non-tax activity that occurs as a result of both direct and indirect activity. These activities include:

1. Direct and indirect payroll:
2. Increases in retail activity from both direct and indirect payroll;
3. Plant construction; and,
4. Machinery and equipment.

1. Direct Payroll and Indirect Payroll

The Direct Payroll computation takes into account a 3-year ramp-up period. In Year 1, there is no direct or indirect payroll. In Year 2, 50% of the total anticipated payroll is in place. In Year 3 the entire anticipated workforce is in place. For each of the 19 years when there is a direct payroll calculation, there is an indirect payroll calculated based on the income multiplier in cell I-9 of the Project Description page.

2. Retail Sales (New Residents) & Retail Sales (Direct Payroll)

There are two calculations under Local Economy Benefits that relate to increased retail sales activity from the project being analyzed. The first relates to the increase in retail sales local merchants can expect from new residents moving into the state. This is simply retail sales per capita times the number of anticipated new residents directly associated with the facility. In order for this calculation to be completed accurately, the user must enter, not only the number of employees and the estimated percent of new workers that will relocate to the community, but the user must also fill in the information asked for in cells C-3 and C-9 of the County Variables page.

While new retail activity will happen as a result of new residents in the community, the direct and indirect payroll will provide workers with additional disposable income that will also generate an increase in retail activity. However, as noted above, a value

for the new residents has already been calculated, therefore in order to avoid counting the income attributed to those employees twice, their purchases have been subtracted from this line item.

The heart of this calculation is the amount of retail sales per dollar of income in the county. Correctly inserting the information asked for in cells C-3, C-4, and C-9 of the County Variables will result in a value automatically being calculated for cell C-11 (Retail sales per $$$ of Income). This is then multiplied by the amount of combined payrolls; i.e., direct and indirect, to determine the amount of increased retail activity.

3. New Building - Direct & New Building – Indirect

Calculations used in this model for building and construction are based on multipliers and assumptions formulated by the South Carolina Bureau of Economic Analysis. The multiplier used is 1.6. The basic assumptions are that 40% of the construction cost is labor and 60% of the cost is material. The BEA further assumes that of the remaining amount 60% will be paid in wages. The BEA assumes that 50% of the construction materials purchased are purchased within the state, cell C-27 of the County Variables page allows the user of this model to raise or lower that amount.

This same calculation is used in determining the indirect construction costs.

4. Machinery and Equipment – Direct & Machinery and Equipment – Indirect

The model uses the South Carolina Bureau of Economic Analysis multiplier of .2 or 20% for equipment purchases. Therefore the impact of the machinery and equipment is 20% of the cost listed in cell C-12 of the Project Description page.

The same calculation is used in calculated the indirect impact of the machinery and equipment.