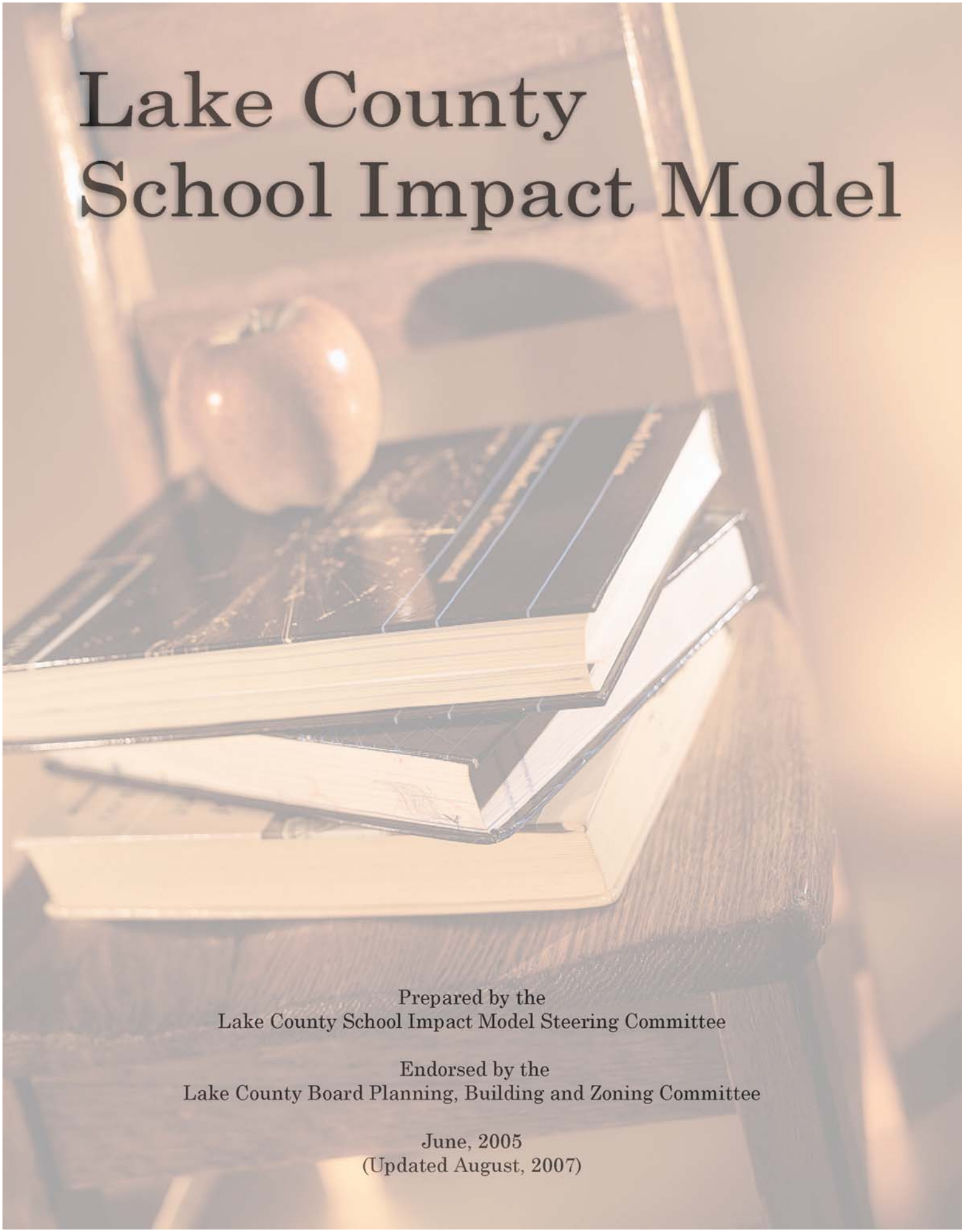
Lake County School Impact Model



Prepared by the
Lake County School Impact Model Steering Committee

Endorsed by the
Lake County Board Planning, Building and Zoning Committee

June, 2005
(Updated August, 2007)

Lake County School Impact Model

Introduction

This Introduction contains background information regarding the School Impact Model. It is organized into the following sections: Model Purpose; Model Assumptions; Model Limitations, including legal limitations on the use of the model; Definition of Terms; and the Model Development Process. The Introduction is followed by detailed Instructions, which explain how to use the model.

Model Purpose

The purpose of the School Impact Model is to provide a tool for analyzing the fiscal impact of a new residential development on a school district. The Fiscal Impact Handbook defines fiscal impact analysis as "A projection of the direct, current, public costs and revenues associated with residential or nonresidential growth to the local jurisdiction(s) in which this growth is taking place" (1978:2). This model calculates the fiscal impact of a new residential development on the school district utilizing a combination of development and district specific parameters and a series of standardized equations.

The model is available for use by any school district in Lake County as an educational tool for reviewing the potential impacts of new development on school district finances. The model is not intended to be the sole tool in calculating development impact fees; nor is it intended for use in determining which developments should be approved. The reasons for these limitations are further explained in the Model Limitations section of this Introduction.

Model Assumptions

Costs – the model is based on average costing for capital improvements and operations.

The capital cost of each new student is a function of the amount of school land and the area of school building required for each student based on standards established by the IL Capital Facilities Board. The model does not consider existing capacity that may exist within school facilities; nor does the model consider that a given development may be the one that necessitates construction of an entire new school. For multiyear developments, the capital cost of land is increased for out years based on a user defined inflation factor. The capital cost of construction is assumed to increase 3% annually. This factor may be adjusted by the user. (See the Model Instructions.) The total capital cost of land and construction attributable to the development is converted into an annual debt service. The debt service equals the school district's principal and interest payment. Converting capital costs into annual debt service is necessary in order to analyze the *current* impact of the development. This approach is consistent with the methodology recommended in The Fiscal Impact Handbook (1978:84).

The operational cost of each new student is assumed to be equal to the school district's existing local education cost per student. The local education cost per student is determined by subtracting the general state aid per student from the school district's per capita tuition charge. The general state aid per student is determined by dividing the school district's general state aid by the school district's average daily attendance. (Refer the Definition of Terms Section for more information.) The local education cost per student is increased for out years based on a user defined escalator factor. Because the model only considers the local education cost per student, it is not necessary to make any explicit assumptions regarding future general state aid funding levels. Users may increase or decrease the local education cost per student based on his or her expectations.

Total annual costs equals the sum of the annual debt service for capital land and construction costs plus the local education cost.

Revenues – the model considers direct new tax revenues and developer contributions for capital and/or operational expenses.

The model calculates the tax revenues generated by the development based on the school district's property tax assessment. The school district's tax rate is required for each model year. The market value of each home type is required for the base year. For multiyear developments, residential property values are increased for out years based on a user defined inflation factor.

The model also considers new tax revenue generated by any non-residential components of the development. The current market value of the new non-residential construction for each year is required. Historically commercial property values have not always increased in the same consistent manner as residential property values. However, the model allows the user to insert an inflation factor, if based on past experiences, the value of the non-residential construction is expected to increase for multiyear developments.

The model allows for developer contributions to be included as revenues. These contributions may be offered by or required of a developer as a condition of approval of the development. Any such contributions must be entered into the model as a one-time revenue source to help cover the school district's capital and/or operational expenses.

One example of an operational expense in the model for which a developer might make a contribution is a "lag fee." Based on the property tax collection cycle, a school does not collect its first property taxes from a development until one year after the houses are occupied. During this one year lag period, the school district is required to educate any students generated by the development without the benefit of any additional tax. As a part of the annexation process, some municipalities are requesting that developers pay an upfront fee to their school districts to address this financing gap. The model allows this lag fee to be entered as a one-time revenue for operating expenses.

A developer may also make a contribution to help cover the capital land or construction costs imposed on the school district. Within the model, these contributions are subtracted from the capital costs imposed on the school district, prior to calculating the annual debt service.

Model Limitations

Direct Impacts – the model only calculates the direct, fiscal impacts (costs and revenues) of residential development. It does not consider indirect impacts.

Residential development may create indirect fiscal benefits for the host community and school district. New residential development may benefit the community by attracting new non-residential developments including office and especially retail. In addition to serving the shopping and employment needs of the new and existing residents, these uses generate new property tax for the municipality and the school district. This non-residential tax revenue could be considered an indirect fiscal impact of the residential development. However, at the same time, new non-residential development could have a negative impact on the General State Aid paid to the school districts. This could occur if the non-residential development greatly increases the Equalized Assessed Value of the property within the school district, which is a factor in determining the General State Aid provided to the school district.

However, the relationship between residential development and future commercial development is unquantified and uncertain. New non-residential development may not occur for many years or it may locate in an adjacent school district. Therefore, the indirect impacts of future non-residential development is not included in the school impact model. The exclusion of indirect impacts is consistent with the methodology recommended in The Fiscal Impact Handbook (1978:2).

Legal Limitations – This model alone is not intended for use in calculating development impact fees; nor is it intended for use in determining which developments should be approved. The following analysis of possible factors limiting the use of the model does not constitute a legal opinion. Any school district or municipality intending to utilize the model is advised to consult with legal counsel prior to making any model-based decisions.

Impact Fees – The full costs of school impacts calculated by this model cannot be assessed on new residential development beyond existing statutory limits imposed on school contributions. The Illinois Counties Code (55 ILCS 5/5-1041, -1042) and the Illinois Municipal Code (65 ILCS 5/11-12-5) merely authorize the necessary dedication of public grounds for schools as a condition of approval in the residential subdivision process in a non-annexation context. Such dedications may consist of land donations for public school purposes, a cash contribution in lieu thereof, or a combination of both (55 ILCS 5/5-1041.1, 65 ILCS 5/11-12/5.1). Public Act 93-0330, adopted in 2003, provides

that cash contributions calculated in lieu of land donations can be spent on site improvements as well.

School impact fee ordinances are further limited by constitutional takings law under the US and Illinois constitutions and both federal and state case law. The Takings Clause of the 5th Amendment to the US Constitution, as applied to the States through the 14th Amendment, provides that private property shall not be taken without just compensation. Similarly, Article 1, Section 15 of the Illinois Constitution provides that private property shall not be taken or damaged for public use without just compensation as provided by law.

Federal and State Court decisions have consistently held that takings analysis applies to developer donations and exactions. Impact fee adjudication at the Federal level is principally concerned with precedents set in two cases, *Nollan v. California Coastal Commission* (483 U.S. 825 (1987)) and *Dolan v. City of Tigard* (114 S.Ct. 2309 (1994)). In *Nollan*, the U.S. Supreme Court held that the imposition of a regulatory requirement affecting the use and enjoyment of private property (in that case, an easement) would be considered a taking requiring compensation unless there existed a "rational nexus" between the condition imposed and the development's purpose or impacts. Later, in *Dolan*, the Court delineated a second component of its takings analysis: the imposition of a development condition or exaction constitutes a taking unless there exists a "rough proportionality" between the condition imposed and the nature and extent of the development's impact.

The Illinois Supreme Court has imposed an even more stringent takings standard for impact fee cases. In 1977, the Court ruled in *Krughoff v. City of Naperville* (68 Ill.2d 352 (1977)) that the government's power to impose school and park land dedication requirements as a condition of development approval in a non-annexation context is permissible only if the required contributions are "uniquely attributable to and fairly proportioned to the need for new school and park facilities created by the proposed development."

In turn, for such school land donations or cash contributions to be considered constitutionally valid under Illinois law, a school district must first verify that additional school land is specifically necessitated by the proposed residential development and also that the impact of such residential development is proportional to the school contribution requirements.

Annexation Agreements/Annexation Agreement Amendments and School District Negotiations – School districts may be able to use the model for informational purposes when negotiating developer contributions. The districts can either do this directly with developers through private contribution agreements; alternatively, school districts can work with municipalities to collect developer contributions as part of their municipal annexation agreements. Municipal annexation agreements are considered voluntary, private contracts and therefore avoid the strict limitations imposed on school contribution

requirements under Illinois statute. School districts and municipalities have greater latitude in negotiating private developer agreements and developer contributions in an annexation setting.

Zoning Changes – Just as the model should not be used for determining impact fees, it also should not be used as a sole determining factor in determining whether a residential development should be approved in a rezoning context. In 1957, the Illinois Supreme Court established the so-called "LaSalle Factors" in evaluating the reasonableness of governmental decisions on zoning change requests (*LaSalle National Bank v. County of Cook*, 12 Ill.2d 40 (1957). *LaSalle* (along with a companion case in 1960, *Sinclair Pipe Line Co. v. Village of Richton Park*, 19 Ill. 2d 370 (1960)) identified eight factors to be weighed in such land use decisions; three of these factors involve weighing the comparative benefits and burdens upon the public and private landowner.

Decisions subsequent to LaSalle suggest that school impact (a public burden) should not be considered a controlling factor in a local government's rezoning decision. Specifically, not all factors are considered relevant in each case, and no single factor should necessarily control in a rezoning decision; however, the first factor, the existing zoning and use of nearby property, is of paramount importance (see e.g. *State Bank of Countryside v. City of Chicago*, 287 Ill. App. 3d 904, 911-12 (1997)). In *Duggan v. County of Cook* (324 N.E.2d 406 (1975)), in response to Cook County's argument that a rezoning and planned mobile home development would overburden its ability to provide educational facilities, the Court held that "while these problems may be considered in weighing the comparative benefits and burdens upon the public and private landholder, they are by no means conclusive."

The model should not be used as a reason to approve certain types of housing developments, such as those that generate the most tax revenue and/or the fewest students; nor should it be used as a reason to deny other types of development, such as those that generate less tax revenue and/or more students. Using the model to encourage denial of less expensive housing developments could make it difficult for low-income families to live in a community. This might trigger Federal Fair Housing and discrimination investigations.

This model alone is not intended to calculate impact fees; nor is it intended to determine whether a residential development should be approved in a rezoning context. It is intended as an educational tool to inform school districts, municipalities, and the public of the fiscal impacts of a proposed development on the school district.

Definition of Terms

Several terms related to school district finances and reports must be understood in order to use the model and in order to understand the model results. These terms are defined below. All of these statistics are included in a school district's Annual Financial Report, as documented in the Model Instructions.

Average Daily Attendance (ADA) – The aggregate number of pupil days in attendance divided by the number of days in the regular school session. The best three months average daily attendance of the prior year is used to calculate the General State Aid for the current year.

Equalized Assessed Valuation (EAV) – The assessed value of a property multiplied by the state equalization factor; this gives the value of the property upon which the tax rate is calculated. The Equalized Assessed Value equals one-third of the market value of a taxable property.

General State Aid – Funds provided from the State of IL to a school district based on formulas that consider the district's ADA and EAV and the State's Foundation funding level for schools ($4,964 for 2004-2005).

Local Operational Cost Per Student – The Per Capita Tuition Charge minus the General State Aid per student. The General State Aid per student is determined by dividing the General State Aid by the Average Daily Attendance.

Per Capita Tuition Charge – The amount a local school district charges as tuition to nonresident students. The per capita tuition charge is determined by totaling all expenses of a school district in its Educational, Operations and Maintenance, Bond and Interest, Transportation, Illinois Municipal Retirement (IMRF) and Social Security, and Rent funds for the preceding school year and subtracting expenditures not applicable to the regular K-12 program.

Total Tax Rate - A school district's total tax rate consists of all funds levied, which may include Education, Operations and Maintenance, Transportation, Working Cash, IMRF, Liability Insurance, Special Education, Social Security, Bonds and Interests, and Fire Safety Bonds.

Model Development Process

The Lake County Board appointed a steering committee to oversee development of the quantitative model based on a request received from representatives of the Big Hollow School District. With oversight provided by the School Impact Model Steering Committee, the model was developed by the staff of the Lake County Department of Planning, Building and Development and the Lake County Administrator's Office. The steering committee consisted of school superintendents, school business managers, developers, Lake County Board Members, and members of the public. The committee did not include engineers or demographers. The Committee created the model using the best information available with the understanding that professional planners, demographers, and statisticians should be employed in the application of the model to a particular development.

Lake County School Impact Model

Instructions

This School Impact Model calculates the total (capital and operational) impacts of a new development on a school district utilizing a combination of development and district specific parameters and a series of standardized equations. The model can be used for developments that have a construction build out period of one to 10 years. The model calculates impacts (revenues minus expenses) for one year beyond the construction period in order to accommodate the one-year lag in tax collection.

Yellow cells are required fields. Blue cells show recommended values. The values in blue cells can be changed, if better data is available. The values in the white and gray cells cannot be changed.

Section 1: School District Data

This section is utilized to input data regarding the school district budget and the anticipated cost of land for construction of new school facilities.

1. Cell E3. Insert the type of school district. For an elementary school district with grades kindergarten through grade 8, enter "k-8". For a high school district, enter "9-12". For a unit school district with grades kindergarten through grade 12, enter "k-12". The school district type will appear in red text in the cells to the right.

2. Cells F6-O6. Insert the school district tax rate for a project build-out period, of up to 10 years.

3. Cells F10-F12. These cells display default values for the acres of land required for each student for the school district type. The default values are based on the Illinois State Board of Education's District Facility Plan. The school district may reduce this number to 0, if it does not require any additional school land to accommodate the new students generated by the development, or otherwise adjust the per student land requirement as appropriate .

4. Cell G9. Insert the cost per acre of improved vacant land where sewer, water, and gas are available. The cost should be obtained from the township assessor.

5. Cell G11. Insert the anticipated annual percent increase in the cost of improved vacant land for multiyear developments.

   The land cost data will be utilized in the model to calculate the school district's land acquisition costs.

6. Cells I10-I12. These cells display default values for the per student cost of constructing a school facility for the school district type. The default values are based on the School Planning and Management: 2007 Construction Report data

for Region 7, which includes the states of Illinois, Minnesota, and Wisconsin. The default data is based on the per student cost of constructing a *new* school facility. The school district may reduce this number to 0, if it does not require any additional school facilities to accommodate the new students generated by the development, or otherwise adjust the per student construction costs as appropriate.

7. Cell K9. This cell displays a default value for anticipated annual increase in school construction costs. The default value of 3% is based on the Illinois Administrative Code regarding construction grants for school district facilities. The default value can be changed if construction costs are expected to change at a faster or slower rate.

   The construction cost data will be utilized in the model to calculate the school district's new facility construction costs.

8. Cell F13. Insert the Bond Rate, as a percent, that the school district expects to pay on a bond to cover the school land acquisition and facility construction costs.

9. Cell I13. Insert the Bond Term, in years, for the bond referenced above.

   The bond data will be utilized in the model to calculate the school district's annual and cumulative debt payment for the school land acquisition and facility construction costs.

10. Cell E15. Insert the per capita tuition charge. This number is found in the school's Annual Financial Report, in the section titled ESTIMATED OPERATING EXPENDITURES PER PUPIL AND PER CAPITA TUITION CHARGE COMPUTATIONS, line 131. Refer to the introduction for a definition of the per capita tuition charge.

11. Cell H15. Insert the general state aid. This number would equal the sum of all of the values in lines 88 and 89, in the RECEIPTS/REVENUES FROM STATE SOURCES section of the school district's Annual Financial Report. Refer to the introduction for a definition of general state aid.

12. Cell K15. Insert the Average Daily Attendance. This number is found in the ESTIMATED OPERATING EXPENDITURES PER PUPIL AND CAPITA TUITION CHARGE COMPUTATIONS section, line 130, of the school district's Annual Financial Report. Refer to the introduction for a definition of Average Daily Attendance.

    The General State Aid per Student is automatically calculated using the General State Aid and the Average Daily Attendance.

The Local Operational Cost is automatically calculated by subtracting the General State Aid Per Student from the Per Capita Tuition Charge.

13. Cell I17. Insert the anticipated annual percent increase in local operational cost per student for multiyear developments.

The school district operational budget data is utilized in the model to calculate the impact of the new development on the school district's annual operating budget.

Section 2A: Development Data

This section is utilized to input data regarding the proposed development including the number and types of units to be built and the anticipated sales price

1. Cell B22. Replace the words "Style 1" with the name of the model of the home.

2. Cell C22. Indicate the type of housing unit using the following code:

   single family detached house sfd
   single family attached house sfa
   multi-family unit mf

3. Cell D2. Indicate the number of bedrooms in each unit.

4. Cell E2 Indicate the unit sale price in current dollars.

5. Cells F22 – O22 Indicate the number of units to be built each year.

6. Cells B23 – O36 Repeat steps 1 through 5 for each home style in the development.

7. Cell F38 Insert the anticipated annual percentage increase in the market value of the residential construction component of the development.

8. Cell J38. This cell shows a default value of $5,000 for the Illinois homestead exemption. The school district may insert a different homestead exemption amount, if, the homestead exemption changes. A value of $0 should be entered if the housing units in the new development will not be owner occupied.

9. Cell F39-O39. Insert the value of new non-residential construction per year in current dollars. Include a value only if the proposed development contains a non-residential component such as office, retail, or commercial buildings.

10. Cell F40 This blue cell shows an annual percentage increase in the market value of the non-residential component to be zero percent. The user may insert an

annual percentage increase, if, based on past experience, the user anticipates an increase in the market value of the non-residential component of the development.

The total number of units per year is automatically calculated and a total number of units for the completed development is automatically calculated as well.

Section 2B: Developer Contribution Data for Capital Improvements

The style names, housing types, numbers of bedrooms, and unit sale prices are automatically copied into section 2B and are shown in the gray cells B45 – E59. In cells F45 – O59, indicate the current developer contributions for capital improvements that are to be paid by the developer for each type of unit for each year.

Section 2C: Developer Contribution Data for Operational Costs

The style names, housing types, numbers of bedrooms, and unit sale prices are automatically copied into section 2C and are shown in the gray cells B64 – E78. In cells F64 – O78, indicate the current developer contributions for operational costs that are to be paid by the developer for each type of unit for each year.

Section 3: Students Per Unit

A recommended student generation rate is calculated based on the type of residential unit and the number of bedrooms. The results are shown in the blue cells E82 – J96. The student generation rates are based on the School Consulting Services' 1996 study of the Chicago Metropolitan Area. The student generation rates can be changed for a specific development if, based on past experiences, it is decided that other student generation rates should be used. If different rates are preferred, replace the displayed rates shown in the blue cells with the desired student generation rates.

Section 4: Construction Value and EAV

This section shows the total values of both residential construction and non-residential construction for the development. It also aggregates the total values over the years and displays the EAV of residential construction, non-residential construction, and for the entire development. It displays the aggregate EAV for the entire development as well. It also shows the Total EAV of the development minus the homestead exemption per year. It then aggregates this amount over the years of the development.

Section 5: Taxes Generated

This section displays the tax revenues for each year as indicated in Section 1. It then displays the dollar amount of taxes generated, while considering the 1-year lag in tax collection. Taxes collected in year 2 are collected at the rate in year 1 and at the EAV in year 1. Taxes in year 3 are collected at the rate in year 2 and at the EAV in year 2. Etc.

Section 6: Students Generated

This section displays the number of students from each level of education that are generated each year. The number of students generated is based on the rate displayed in Section 3 whether the default rate was used or if a different rate was inserted. The total number of students generated per year is automatically calculated. The total for each year is added together to give the total number of students generated by the entire development.

Section 7: Costs Per Student

This section is based on the per student school land and per student school construction costs and the cost escalators entered into Section 1.

Section 8: Capital Costs Due to Development

This section is calculated by multiplying the figures in Section 7 with the figures in Section 6. The total capital cost due to development is shown for each level of education. The costs for each education level are added together for a district capital cost due to development indicated as "Total."

Section 9: Current Developer Contributions for Capital

The Current Developer Contributions for Capital are calculated using the data in Section 2B: Developer Contributions for Capital Improvements.

Section 10: Capital Cost and Debt Service

The first part showing Remaining Capital Cost After Developer Contributions is calculated for each year by subtracting the Annual Developer Contributions in Section 9 from the Total Capital Costs Due to Development in Section 8.
The Annual Debt Service on Remaining Capital Cost per year is calculated using the Remaining Capital Cost After Developer Contributions, the Bond Rate in Section 1, and the Bond Term in Section 1. The Cumulative Annual Debt Service is calculated by aggregating the Annual Debt Service on the Remaining Capital Cost for each year. This is done because the school district must pay the debt service on bonds issued in each of the earlier years for the entire term of the bond.

Section 11: Operational Costs Due to Development

The Operational Cost Per Student for year 1 is the Local Operational Cost Per Student in Section 1. The Operational Cost Per Student for the following years increases at the rate show in Section 1, Item 13.

The Operational Costs Due to Development for each year is calculated for each level of education by multiplying the Operational Cost Per Student by the Students Generated shown in Section 6. The numbers generated reflect that students generated in year 1 continue to be educated through the entire build out period, as do students generated in subsequent years. The total operational cost due to development is shown for each level of education. The costs for each education level are automatically added together for a district operational cost due to development, indicated as "Total."

Section 12: Total Annual Cost Due to Development

The Annual Costs are automatically calculated by adding the Total Operational Costs for each year in Section 11 to the Cumulative Annual Debt Service in Section 10 for each year.

Section 13: Current Developer Contributions for Operation Costs

The Annual Developer Contributions are automatically calculated using the data provided in Section 2C: Developer Contributions for Operational Costs and the number of each type of unit that will be built provided in Section 2A: Development Data.

Section 14: Impact of Development

This first part, Annual Impact, is calculated for each year by taking the Total Tax Revenues shown in Section 5, subtracting the Annual Costs shown in Section 10, and adding the Annual Developer Contributions shown in Section 13. The Aggregate Impact Adds the Annual Impact from the previous years, to the Annual Impact for the new year. Because this model is intended to extend one year beyond the last year of construction (due to the lag in tax collection), if the development is completed before 10 years, the consecutive years after one year of the development's completion will show a zero value for both Annual Impact and Aggregate Impact.

The total number of housing units in the development, from Section 2A, is used to calculate the Aggregate Impact Per House; and the total number of students in the development, from Section 6, is used to calculate the Aggregate Impact Per Student. These figures are shown at the bottom of Section 14.