Ohio Planning and Zoning Law
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Abstract:
In 1943, the Ohio region provided zoning subdivision administrations and long-range planning services, which is also known as Comprehensive Plan. This paper outlines the analytical and practical procedures at the Ohio planning and zoning law for the development of the community. The state grants local governments the power to regulate land use. Local governments establish planning and zoning communities and the board of zoning which help the state by residing over zoning appeals and devise traditional neighborhood codes to urban areas, and rural areas on the urban fringe. The zoning Commissions also calculate impact fees provide fiscal analysis and set land use regulations.

Zoning is a legislative method of regulating land use by the diving of subdivision (city, village, township, or county) and the enactment of local regulations to control the uses within a district. The purpose of zoning is to control density, traffic, and aesthetics and to regulate land use in order to prevent conflict on a community-wide basis. It is also used to encourage development of affordable housing, to protect the environment and morality. This paper presents a case study of the planning and zoning law in the state of Ohio.

Introduction:
The culture of planning in Ohio places local governments are at the crux of regulatory power, with limited constraints. The municipal home rule provisions of the state constitution and state enabling statutes confer a great deal or authority on local governments. (Planning is permissive, rather than mandatory) Failure to engage in planning prior to enactment of land use and related regulations doesn’t necessarily invalidate planning zoning power. Moreover, the state, with limited exceptions in the environmental area (a source of growing state power), doesn’t exercise regulatory oversight over governments. When a conflict between state and local authority arises, particularly with municipalities, it is usually settled through litigation rather than some administrative procedure, between locally enforce police power regulations and the “general” laws of the state lays a line that remain fuzzy in conflict. For example, in a 1992 case, the Ohio Supreme Court ruled that municipality may enact building code regulations that are stricter than those in Ohio Basic Building Code (OBBC), a state wide code for certain residential, commercial, industrial, and institutional buildings, even through the OBBC was intended to establish uniform building construction and fire safety standards for the state.

The planning commission’s has many powerful tools for implementing a local comprehensive plan. One of them Capital Project Program (CIP). Selected commission with a valuable advice and perspective to the legislative and executive branches of government. It can also help coordinate activities of various government departments and agencies, and ultimately influence the pace and quality of development in a community. Land-Use and development are integrated with transit.

In some major cities, like Cincinnati and Cleveland, with a strong planning tradition, the planning systems have been very sophisticated. In contrast to other states, like Florida, Oregon, and California, the Ohio professional and the planning community (and the environmental community as well) have not, generally speaking, been a strong advocate of reform measures. The recommendations of reform from the Ohio Land Use Review Committee, discussed but, did not gain widespread support from professional and lay planners. The fundamental structure of planning and land use regulation in Ohio remained unchanged.

The four levels of government-State, County, Township, and Municipality- have conflicting interests in the control of land use in Ohio. Each level views the others’ motives suspiciously, sometimes with good reason. Further, urban areas are spread out over the state. Physical separation breed’s lack of recognition of common objectives. Northeast Ohio communities, for example, may not see their fate tied to legislation that affects southwest Ohio. Indeed, some local agreement organizations in Ohio view “Planning” as another pesky...
government procedure that does little but cost their members money. Consequently, there is no true statewide partnership to solve complex problem related to urban growth. In the absence of agreement and action on reform objectives, the planning community, through the Ohio Planning conference, which is the state chapter of the American planning Association, has instead organized training for appointed planning officials. The Ohio Department of Development (ODD), The Ohio Department of Natural Resources (ODNR), The Ohio Legal Community (OLC), The Ohio Department of Transportation (ODOT), and Ohio Environmental Protection Agency (OEPA) provide continuing education for its members.

This paper focuses on planning and zoning law to provide the purpose of zoning in order to encourage the development of affordable housing and manage a zoning density primarily for residential development. When off-site facilities (infrastructural facilities, e.g. water lines, sewers, and roads), became issues, the facilities were those that still had a direct relationship to individual developments. Utilities and roads are physically connected to developments, and the use of these facilities by private developments can’t be denied because of this connection. This practice has evolved remarkably.

The analytical tool to provide the basis for constructive policy options and help citizens and public officials understand the consequences of alternative ways of managing planning and zoning, these four analytical procedures are used:

1. A unified development ordinance (Density (net and gross density) and dimensional regulations)
2. Encouraging development of affordable housing: 1990 amendment to Article of Ohio Constitution section 16, clarified the inclusion of housing as a “Public purpose” for political subdivisions. It allows the state to make grants and loans. Thus, zoning regulations and decisions, which encourage such housing, would certainly advance this state level policy.
3. Impact fees: The Calculation, determination and benefit considerations of proportionate - share
4. Fiscal impact analyses.

Planning procedures and zoning process:

(Figure 1) shows the relationship between planning process and zoning laws. This help to simplify the consequences of alternative ways of managing the planning.

**Federal, State, Local, Laws and Regulations**

- Federal, State, Local, Laws and Regulations

**Laws**

- Principles, Statutes, and codes

**Local Government**

- Mayor
- Local Legislator
- City Council, Town Council
- Board of County

**Other Local Boards**

- Help minimize unforeseen planning consequences

**Financial Institutions**

- Financial institutions constitute a pervasive force in planning
- Lending institutions are cognizant of all relevant, local plans and ordinance

**Nearby Community**

- Required assessment of impact strategy activities in local plan
- Solves shared planning problems

**Planning Process and Zoning Laws**

- Planning Commission
  - Preparation and revision of the the comprehensive plan and local land use regulations
  - Review of development proposals

- Board of Zoning Appeals
  - Applications for zoning variations
  - Zoning procedures are applied fairly

- Planning Staff
  - Town, Cities, Counties employ Local Planners

- Developers and Builders
  - Transfers land from one use to another
  - Acting to satisfy a perceived community demand for a service or product
  - Realize market and market demand

**Citizen**

- Most Essential element of the Planning Process

**Media**

- Presents a direct link to the larger community

**Figure 1**
The Comprehensive Plan and Zoning Process:

The Comprehensive plan also known as Master plan, have a distinct meaning: they are the local government’s textual statement of goals, objectives, and policies accompanied by maps to guide public and private development within its planning jurisdiction. The comprehensive plan is the chief policy instrument for:

- The administration of zoning and subdivision regulation;
- The location and classification of streets and thoroughfares;
- The location and construction of public and semi-public buildings and related community facilities and infrastructures (Water, Storm and Sanitary Sewers, Gas, etc.)
- The acquisition and development of public and semi-public properties such as parks and open spaces.
- The initiation of new programs, such as those in the areas of housing rehabilitation and economic development, to address community needs.

The Ohio revised code doesn’t define what constitutes a “Comprehensive plan or Master plan” but it defines the Standard State Zoning Enabling Act (SZEA), which is the basis for most state zoning enabling acts in the USA. Under it, zoning regulations are to be made in accordance with a comprehensive plan. This is the language that appears in the Ohio counties and townships enabling legislation, but not in the municipal statutes. The SZEA’s drafters explain the meaning of this phrase, “This will prevent haphazard or piecemeal zoning. No zoning should be done without such a comprehensive study”. Ohio land Use Review Committee, issued a report in June 1977 proposing changes in the state’s land use laws. It asked legislation to give counties and municipalities the ability to regulate lot sizes and land divisions including acreage and health concerns within the context of adopted local comprehensive land use plans.

Zoning Process:

In the early 1930s, the division of building and housing occurred. Bureau of standards, in the United States department of commerce, tracked the adoption of zoning codes in the United States as part of its follow-up on the implementation of the standard City Planning and Zoning Enabling Acts. Ohio municipalities adopted and amended zoning codes during that formative by Ohio municipalities, creating a zoning process which contained the following elements, although not necessarily in the order presented:

1. The purpose of zoning regulations is to serve, often in the context of the state enabling legislation.
2. Establishment of districts and provisions for an official zoning district map.
3. Application of district regulations.
4. Rules for interpretation of district boundaries.
5. Nonconforming Uses.
6. District regulations.
7. Supplemental district regulations.
8. Enforcement and compliance procedures.
9. Board of zoning appeals.
10. Special conditional use permits.
11. Schedule of fees and charges.
12. Method of amendment.
13. Penalties for violation.
14. Repeal of conflicting regulations.
Planning and Zoning Power:

The power to plan, zone or regulate land use belongs to the state. The Ohio Constitution, Article II, § 1, vests the state’s legislative power, which includes the police power, in the general assembly. Through its constitution and enabling statutes, Ohio has delegated most of its planning and police power authority to regulate land use to the local level. In recent years, the state has enacted statutes which address land use issue of statewide concern and in effect, take back some of the delegated power. These statutes reflect, for example, a greater concern for the environment by regulating the location of hazardous waste facilities and for disempowered groups by regulating the location of group homes for the disabled and day care facilities. The statutes include full or partial preemption of local regulatory systems.

The state’s delegation of authority has created a four-track system of planning and zoning power involving counties, townships, and charter, non-charter or statutory plan municipalities. Municipalities are subsequently divided into two classes: Villages, with a population under 5,000; and Cities, with a population 5,000 or greater.

The four analytical procedures for planning and zoning

1. A Unified Development Ordinance (Density-Net& Gross- and Dimensional regulation)

   Density refers to the average number of persons, families, or dwelling units per area unit of land, typically an acre (43,560 square feet). There are different ways to regulate residential density, to determine which will best meet the community’s needs. The standard residential density control techniques are as follows:

   (1) Minimum lot sizes which limit the number of dwelling units per acre; a minimum lot size requirement is often used to regulate residential density and control density. All lots in the following zones shall have at least the amount of square footage indicated in the following table:

<table>
<thead>
<tr>
<th>Zones</th>
<th>Minimum Feet²</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-3</td>
<td>3,000</td>
</tr>
<tr>
<td>R-7</td>
<td>7,000</td>
</tr>
<tr>
<td>R-11</td>
<td>11,000</td>
</tr>
<tr>
<td>R-15</td>
<td>15,000</td>
</tr>
<tr>
<td>R-20</td>
<td>20,000</td>
</tr>
<tr>
<td>B-1</td>
<td>3,000*</td>
</tr>
<tr>
<td>B-2</td>
<td>5,000*</td>
</tr>
<tr>
<td>B-3</td>
<td>7,000</td>
</tr>
<tr>
<td>B-4</td>
<td>No Minimum</td>
</tr>
<tr>
<td>B-5</td>
<td>No Minimum</td>
</tr>
<tr>
<td>B-6</td>
<td>No Minimum</td>
</tr>
<tr>
<td>B-7</td>
<td>No Minimum</td>
</tr>
<tr>
<td>B-8</td>
<td>No Minimum</td>
</tr>
</tbody>
</table>

   * If used for residential purpose, otherwise no minimum.

   The greater the minimum lot size, the lower the density. However note that for two reasons a minimum lot size does not translate readily into a dwelling-units-per-acre equivalent. First; a substantial portion (usually 10 to 20 %) of the lot will be consumed by the street rights-of-way. Second, unless the shape of the tract and its topography cooperate perfectly, many of the lots will have to exceed minimum lot size.

   (2) Square feet per dwelling unit, density expressed in dwelling units per acre (i.e. 8,700 square feet per dwelling unit equals five unites per acre).

   (3) Minimum floor area requirements Floor/Area ratio (FAR) approach is used most to control density. FAR is simply a technique to regulate residential density. FAR is simply a fraction, expressed in decimal form, with the permissible square footage of building floor area as the numerator and the square footage of building floor area as the denominator. Thus, with a FAR of 0.92, a developer could construct approximately 4,000 square feet of floor area per acre or four dwelling unit of 1,000 square
feet. This technique also can regulate the density.

(4) Minimum lot width or frontage requirements which, when coupled with minimum lot area requirements further reduce density by limiting the number of lots which may front on a street; without limiting the generality of the foregoing standard, the following table indicate minimum lot width that are recommended. The lot width shall be measured along a straight line connecting the points at which a line that demarcates the required setback from the street intersects with lot boundary lines at opposite side of the lot.

<table>
<thead>
<tr>
<th>Zones</th>
<th>Lot Width (in Feet)</th>
<th>Zones</th>
<th>Lot Width (in Feet)</th>
<th>Zones</th>
<th>Lot Width (in Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-40</td>
<td>100</td>
<td>R-7</td>
<td>70</td>
<td>B-4</td>
<td>100</td>
</tr>
<tr>
<td>R-20</td>
<td>100</td>
<td>R-3</td>
<td>50</td>
<td>B-5</td>
<td>100</td>
</tr>
<tr>
<td>R-15</td>
<td>85</td>
<td>B-1</td>
<td>None</td>
<td>M-1</td>
<td>100</td>
</tr>
<tr>
<td>R-11</td>
<td>80</td>
<td>B-2</td>
<td>50</td>
<td>M-2</td>
<td>100</td>
</tr>
<tr>
<td>B-3</td>
<td>70</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(5) Minimum requirements for public open space dedication in subdivision regulations, which increase the area required for open space, thus lowering the density.

(6) Increasing width required for street rights-of-way in subdivisions, which increase the area devoted to publicly owned property, also reducing the density.

There are two types of density provisions: (1) net density (computed for the building site excluding streets, open space and other publicly owned land) and (2) gross density (which includes streets and other publicly owned land). Net density more accurately the applications of a zoning regulation to buildable land area in calculation of the number of dwelling units that may be constructed. As an example of computation of net density, assume a zoning ordinance for a certain district that requires a 7,500 square foot lot for each single-family residence. If 15 percent of each acre were to be devoted to public streets or open space, and 85 percent allowed for private ownership, then net density would be compute by reducing the amount of land in a gross acre to a net or buildable acre dividing the result by the lot area per dwelling unit:

\[
(43,560 \text{ square feet/acre} \times (100\%-15\%) \div 7,500 \text{ square feet/dwelling unit} = 4.94 \text{ dwelling units/net acre}
\]

If the amount of land in public ownership were increases to 20 percent (assume that more open space was required), then the density would drop to 4.65 dwelling units per net acre. As an example of how to calculate gross density, assume a subdivision of 45 acres, including streets and other publicly owned land, with 180 single-family lots each containing a dwelling. To determine gross density, apply the following calculation:

180 dwelling units \div 45 gross acres = 4 dwelling units/gross acre

Gross density can be converted to net density by applying the proportion of acreage in streets and other public ownerships (assume the proportion to be 20 percent):

180 dwelling units \div (45 gross acres \times (100\% - 20\%)) = 5 dwelling units per acre

Housing types fall into different categories:

(1) Detached housing in which each dwelling is on its own site. The conventional single-family home is an example of this;

(2) Attached housing in which each unit has separate entrance and a private outdoor space. Attached housing units are joined side-by-side, sharing a common wall, or are above one another. Typical forms of attached housing are town or row houses, stacked townhouses, or stacked or row duplexes;

(3) Apartments where several dwelling units share a single structural envelope and common
entrance, usually indoors. Apartments can be walkups, typically up to four floors, or elevator buildings. Standard apartment shapes are garden apartments, where the buildings are grouped around courtyards, and slabs and towers, the latter two being high-rise units.

There are no hard and fast rules for what constitutes appropriate densities for various types of housing. Kevin Lynch and Gary Hack, in the classic text, *Site Planning*, provide the following ranges:

<table>
<thead>
<tr>
<th>Dwelling Unit Type</th>
<th>Floor Area Ratio</th>
<th>Net Density</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family</td>
<td>Up to 0.2</td>
<td>8 dwelling units/net acre</td>
</tr>
<tr>
<td>Zero lot-line detached</td>
<td>0.3</td>
<td>8-10</td>
</tr>
<tr>
<td>Two-family detached</td>
<td>0.3</td>
<td>10-12</td>
</tr>
<tr>
<td>Row houses</td>
<td>0.5</td>
<td>16-24</td>
</tr>
<tr>
<td>Stacked townhouses</td>
<td>0.8</td>
<td>25-40</td>
</tr>
<tr>
<td>Three-story walkup apartments</td>
<td>1.0</td>
<td>40-45</td>
</tr>
<tr>
<td>Six-story elevator apartments</td>
<td>1.4</td>
<td>65-75</td>
</tr>
<tr>
<td>Thirteen-story elevator apartments</td>
<td>1.8</td>
<td>85-95</td>
</tr>
</tbody>
</table>

Lynch and Hack observe:

Any house type can be built at lower densities than those shown, although it may be difficult to justify much lower figures economically. It may prove impossible to maintain community facilities and services if densities are too low. Single detached houses are commonly built at very low densities, ranging down to one or two houses per acre in some suburbs or one house on four acre in others. Such development is costly to service and wasteful of land and infrastructure.

Similarly, there are no universally accepted, authoritative definitions of what constitutes low, medium, and high densities. But one of the authors of this treaties, Meck, has observed, on the basis of professional experience with suburban communities in Ohio, that the following ranges are typical:

<table>
<thead>
<tr>
<th>Range</th>
<th>Dwelling Units Per Net Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low density</td>
<td>1-7</td>
</tr>
<tr>
<td>Medium</td>
<td>7-14</td>
</tr>
<tr>
<td>High</td>
<td>14-24+</td>
</tr>
</tbody>
</table>

Low-density development includes single-family attached developments (including townhouses, and duplexes). Medium density development includes two-family garden apartments. Higher density development may include garden apartments (two-stories) and three story walkups.

Zoning regulation and decisions, which encourage such housing, would certainly advance the state-level policy. A zoning ordinance that limited the use of the first 300 feet of a landowner’s property to the construction of single-family homes.

Zoning encouraging development of affordable housing, controlling competition, protecting the environment, protecting morality and controlling aesthetics. The Ohio Supreme Court stated in upholding the constitutionality of a design review ordinance, that:

§ There is legitimate governmental interest in maintaining the aesthetics of the community and, such; aesthetic considerations may be taken into account by the legislative body in enacting zoning legislation.

§ The monetary interests of protecting real estate from impairment and destruction of value are included under the general welfare aspect of the municipal police power and may justify its reasonable exercise.
2. Encouraging development of affordable housing

In order to encourage the development of affordable housing throughout the community, a zoning density is available for many types of residential development. Density can be applied to a proposed residential development, subject to the following requirements:

- Development of rental units only is eligible,
- A minimum of 20% new units need to be built to the eligible, either on a new site or as an addition to an existing development.
- At least 15% of the units shall have payments affordable to persons and families with annual incomes at or below 60% of the area median family income by family size, according to target income limits set by HUD. A developer could receive a 20% density bonus if providing units for persons with incomes below 50% of the median family income and could receive a 15% density bonus for assisting persons between 50% and 60% of the median family income. These affordability limits shall be adhered to for minimum of 15 years. The housing developer shall be required to submit an annual report during this time to the Housing and Community Development (in the city) or to County Manager or his designee (in County) to verify incomes of persons residing in and rents being charged in the reduced cost units are within the established limits. Compliance measures, including but not limited to contracts, restrictive covenants, deed restrictions and stipulated penalties, may be required.
- All reduced-cost units would be built with similar or compatible physical and design characteristics. These units would also not be physically grouped together or otherwise separated from other units.
- This program would be eligible in all zones where residences are permitted, including RD, R-20, R-15, R-10, R-8, R-5, R-3, RZM8, RM12, RM16, RM20, PDR, MU, O&I-2, NC, SC and CBD.
- An exception to use of these provisions in residential zones would be where an adopted development plan already shows an approved residential development layout of the site and/or specifies a maximum number of units allowed on the site and where adding the bonus units would be a significant change to the layout or exceed the total permitted units on the site.
- The density bonus would be calculated as follows:

3. Impact fees: The Calculation, determination and benefit considerations of proportionate share

Impact fees are land development regulations, and they have evolved just as the regulation of land development has evolved. The object of development regulations is to protect the public. Protecting the public has required the prohibition of certain types of developments. Such regulations have been found to be within the power of local jurisdictions provided that there is a clear public purpose and that regulations are reasonable. Protecting the public also commonly requires that certain types of developments be denied because the necessary supporting facilities are lacking. Impact fee mean a monetary charge imposed by local government on development to recoup or offset a proportionate share of public capital costs required to accommodate such development with necessary public facilities. The question in all controversies about impact fees is who is to pay for the roads, parks, schools, utilities, protection services, and other public facilities needed to serve growing population? The objective of impact fee is to ensure adequate capital facilities. The adequacy of capital...
facilities is critically important to entire system of land development regulation.

The uses of impact fees are usually confined to payments for capital facilities and allow community to provide the capital facilities that new development will require. Impact fees currently exist to pay for capital improvements to the following facilities and services (Water, solid waste, sewers drainage, roads, parks, public school, emergency medical service and public buildings). The most common fees charged are for water and sewer facilities. These fees are also known as “hook-up” or “connection” charges. Regardless of nomenclature, a charge for the purpose of paying all or portion of the capital cost of a facility is an impact fee. After utilities, highways are the next most common charge. The reasonableness of impact fees is usually determined by the rational nexus test.

The Rational Nexus Test: the legal basis for this test and the major tenets of the rational nexus test follow:

- There must be a reasonable connection between the need for additional facilities and the growth resulting from new development;
- The fees charged must not exceed a proportionate share of the cost incurred in accommodating the development paying the fee; and
- There must be reasonable connection between the expenditure of the fees collected and the benefits received by the development paying the fees.
- The legal principles must be restated in operational terms so that an amount-a fee-may be calculated. The operational principles are:
- The need for additional capital facilities that will be finances with impact fees must be a consequence of new development rather than arising from existing developments;
- The charges or fees imposed upon a new development must be no more than a proportionate share of the local government’s cost of those new capital facilities needed to serve new developments; and
- The revenues raised must be managed and expended at such a time and in such a time that the development paying the fee will receive a substantial benefit from the improved facility.

The issue then becomes the determination of proportionate share. Before that determination is made, however, it is important that impact fee system respect these three major tenets of the national nexus test. Communities using impact fees to be able to show that the facilities for which impact fees are to be paid are needed because of development. It must also be shown that the facilities provided by these fees will reasonably benefit or serve the developments paying the fees. The underlying question is how a community can calculate proportionate-share impact fees.

Facility Standards:

The standards used in determining need are best established within the comprehensive plan. Moreover, such standards should relate to both existing and new developments. The need for capital facilities may be expressed mathematically:

\[
\text{Need improvements} = \text{Service Standard} \times \text{Demand Unit}
\]

This formula introduces the “Demand Unit” A demand unit is a unit associated with a new development that generates the need for improvements in public facilities. For a single-family home, the demand units could be the occupants for purpose of parks; school-age children for purpose of schools; vehicular trip-ends per hour or day for purposes of roads; or gallons per day for purposes of potable water:
Given these standard, a residential unit within 2.5 persons, .3 school-age children, and five trip-ends per day would require that following:

<table>
<thead>
<tr>
<th></th>
<th>Demand Units and Service Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>2.5 persons at Five acres per 1,000 populations requires 0.0124 acres of additional Parks;</td>
</tr>
<tr>
<td>Schools</td>
<td>.3 school-age children at one student station per pupil requires .3 additional student stations;</td>
</tr>
<tr>
<td>Roads</td>
<td>Five trips-ends per day of six miles each at 7,500 trips per lane-mile requires 0.004 additional lane miles of roads; and</td>
</tr>
<tr>
<td>Water</td>
<td>2.5 persons at 100 gallons per day per person/day require additional water treatment and distribution capacity of 250 gallons per day.</td>
</tr>
</tbody>
</table>

All services can be expressed in terms of demand units and standards of services. Frequently, however, these data are not available. Developing such data would be the first priority in instituting a system of impact fees. Great care needs to be taken when using standards recommended. Such standard may or may not be applicable to an individual community. Additionally such standards would still have to be compared with the existing standard. The local legislative may have to make the final determination as to which standard is most appropriate. It is often better to have the ultimate decision made by elected policy makers rather than by an administrative official or consultant.

Several impact fees will be set out as examples. The fees are for roads; school, parks, public libraries; and law enforcement. The demand units for single-family unit and the service-level standards employed in these fees are:

<table>
<thead>
<tr>
<th></th>
<th>Demand Units and Service Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>3.813 persons per three-bedroom, single-family unit (demand 3.813 persons) at a standard of three acres per 1,000 populations;</td>
</tr>
<tr>
<td>Schools</td>
<td>.6977 public school pupils per unit (demand unit is .6977 Students) requiring 129 square feet of building area and 1,836 square feet of land area per student;</td>
</tr>
<tr>
<td>Roads</td>
<td>Five trips-ends per day with an average length of 6.83 miles (making demand units 34.15 miles per day) and level of service translates to 7,500 vehicles per lane-mile per day trips per lane-mile requires 0.004 additional lane miles of roads; and</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>2.24 persons per unit (demand unit are 2.24 persons) at 1.4 volumes per capita and 0.35 square feet of building area per capita; and</td>
</tr>
<tr>
<td>Law Enforcement</td>
<td>2.42 persons per unit (demand units are 0.4937 persons after conversion to calls for law enforcement services)</td>
</tr>
</tbody>
</table>

These standards were all subjected to public debate and were adopted by the respective legislative bodies. Once the physical quantities are established, costs must be determined.

Cost of Accommodating Development:

The manner in which cost information may be obtained or expressed is an important factor in establishing standards because the objective is to first determine capital improvement cost per unit of development and then to determine a proportionate share of those costs. It follows that standards, costs, and share of costs must be in consistent units.
Cost data are needed for an acre of park, a lane-mile of road, a student station, police support equipment and facilities per officer, a square foot of library space, and library book. If utility fees are being established, the cost per gallon of capacity becomes the relevant item. The formula for the cost is:

\[
\text{Price}(c) \times \frac{\text{Price}(t)}{\text{Index}(t)} \times \text{Index}(c)
\]

Where:

Price (c) is the price in the current (or base) year; Price (t) is the price in the year incurred; Index (c) is the price index in the current (or base) year; And index (t) is the price index in the year incurred.

Multiplying the service provision standards, per demand unit, by capital cost per unit of service establishes the capital improvement cost per unit development this also may be expressed as formula:

\[
\text{Total Cost} = \text{Needed Improvement} \times \text{Cost Per Unit}
\]

The calculations can result the Capital improvement cost per unit of new development and reaching the result for facility standards, demand units, and costs. The only problem is that these payments are usually not sufficient to cover the total cost. Therefore, it is necessary to take the next step-to determine what portion of the total costs new development.

Proportionate Share of Capital Costs:

This approach to impact fee calculation is based upon the premise that new development can’t impose a fiscal burden upon the community. Normally new development will pay towards capital improvement in the form of general taxation, debt service payment, and user fees. The task is to calculate how much of capital costs are covered by these payments. There are seven factors should be considered in establishing a proportionate share of capital costs:

1. The cost of existing capital facilities;
2. The method by which the existing capital improvements were financed;
3. The extent to which new development have already contributed to the cost of the existing capital improvements;
4. The extent to which new development will pay for existing capital improvements in the future through user fees, debt service payment, or other payments to ward the cost of existing capital improvement
5. The extent to which new developments are required to construct and/or dedicated capital improvements as conditions of development or construction approval;
6. Extraordinary costs, if any, in serving the new development; and
7. The time-price differentials inherent in fair comparisons of amounts paid at different times Payments by New Development Toward Capital Costs:

The general formulation for calculate new development toward Capital costs as follows:

\[
\text{PresentValue} = \frac{\text{FutureAmount}}{(1 + i)^n}
\]

Where n is the number of years between the present and when the amount is to be received, and I is the interest rate. The amounts of concern in impact fee calculation are not one-time payments in the future. This means that there will be a payment in one year, in two years, in three years, etc. thus, the issue is a stream of payments over a number of years in the future. First, there is a need to cut this analysis off at some point. A common cut-off point 25 years, although a period as long as 45 years and a period as short as 15 years have been used. The
The current litigation on this fee should provide some insight into how a local government may go about establishing fees, given existence of grants and bond. The formula for dealing with identifiable future payment is:

\[
\text{Proportionate Share Cost} = \text{Total Cost} - \frac{\text{Credit}}{(1 + i)^n} \]

Where:

\(N\) = the number of years to be considered, \(n\) = any one of the \(N\) years, and \(i\) = the relevant interest or discount rate.

4. Fiscal impact analyses

Fiscal impact analysis is an analytical tool. A full impact assessment of proposed development requires a full cost accounting methodology, which use analytical techniques identify, quantify, and monetize all the social and environmental benefits and costs resulting from projects, policies, and program. Given the limited scope of fiscal impact analysis. Fiscal impact analysis is an analytical tool used within a comprehensive policy framework. It generally provides a clear vision of what a community wants to become, strategies to achieve short term and long-term milestones.

By 1980s, fiscal impact analysis had become a common element of development impact and planning assessment of rezoning, land-use changes, or comprehensive plan amendments. It also was used to support economic development decisions. During late 1980s and 1990s, national attention to the effects of sprawl led to studies regarding the fiscal impacts of the alternative development patterns, which applied a new Federalism and shifted the infrastructure funding from the federal to local governments. There are four basic steps to fiscal impacts analysis methods:

1. Determine the numbers and types of population generated by growth- total population, school-age children, employees, retirees, etc.
2. Estimate the public costs to serve those populations.
3. Estimate the public revenues generated by growth.
4. Compare development generated costs to revenues.

Conclusions and Observations

The Ohio planning and zoning law concluded that state-planning development for local and comprehensive plans should be:

1. Examined by the development review process to streamline permit processing, and establish time limits for various parts of the review process.
2. Create a hearing examiner position to replace the board of zoning appeals if the board is overwhelmed by applications and decisions take much too long.
3. Periodically review zoning and subdivision for all regulations.
4. Updating the zoning ordinances.
Dr. Salwa Tawfik Ramadan, Ohio Planning and Zoning Law, 39th IsoCaRP Congress 2003

From my point of view I can say that:

- Each Role is vital
- Providing Leadership
- One Planning Commissioner.
- Think Regionally
- Follow the Rules: Guardian of the Public Environment:

References

10. American Planning Association – Lincoln Institute of land policy Audio Conference program – Getting to Density November 6, 02.