Instead of occurring in a vacuum, educational planning should use strategic, priority-driven approach that articulates the interactions between the community and the schools. Such planning requires understanding of the community context and goals and values for public schools. This working paper attempts to apply urban planning methods to educational long-range planning. The first part explains an innovative approach synthesizing 20 years of prior studies by presenting the conceptual framework, diagramming its components, and indicating the flow of the planning and policy-making process. The planning process depends heavily on contributions from three groups: (1) an interdisciplinary team to assess contextual and policy variables and forecast community outlook; (2) a management team of teachers and administrators to meet with the interdisciplinary team; and (3) community participation through a broad-based citizens' advisory group. Various developmental stages are outlined. The second part provides a case illustration using Stamford, Connecticut, a community experiencing numerous demographic, economic, and land use changes during the past 35 years. Numerous exhibits and a list of the author's planning and public policy reports are appended. (MLH)
Working Paper

EDUCATION PLANNING FOR A POST-INDUSTRIAL SOCIETY:
A Comprehensive Community-Based Approach
to Planning for School Systems

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EDUCATION PLANNING FOR POST-INDUSTRIAL SOCIETY: A COMPREHENSIVE
COMMUNITY-BASED APPROACH TO PLANNING FOR SCHOOL SYSTEMS

Part I

Overview: The need for a comprehensive community-based approach

Superintendents and School Boards, Ministries and local
governments are constantly faced with important school planning
decisions: whether to build a new school or close an existing
one; where to locate a new facility; how to design it
appropriately; what kind of curriculum is needed for students to
gain access to the economy of a post-industrial society; what
kind of support services and staff are required to meet the
educational goals of equity and empowerment; and how can the
school be used to expand opportunities for the community as a
whole?

In all of these planning challenges to provide quality
education, key decision makers need to be cognizant of both the
present and future education needs of their students. To assess
these needs, there must be an understanding of the future of the
community and its impact on the schools. To plan for the schools
in a strategic, priority-driven approach, an articulation of the
interactions between the community and the schools, and the role
that each plays in constraining and shaping the development of
the other is necessary.

All too often, however, educational planning is done in a
vacuum. Rarely are the systems which comprise a community take
into account in planning for schools. Public Schools are not
isolated from the other systems in the community, however.
Rather, they support and influence one another. Education
planning, therefore, requires understanding of the community
context in which education takes place, as well as the
community's goals and values for the public schools. The
planning process brings school and community leaders together to
ask the policy question: What is the future of the community and
how will it affect the school system and its role in developing
the full human potential of its citizens?

Urban planning methods, as applied to the public school
systems, can provide the necessary understanding of the community
setting together with explication of the educational context.
Yet few educators have the time or the know-how to develop a
broad based comprehensive planning process. Moreover, urban
planners, though trained to examine the community and offer
directions for its growth, typically do not become involved with
school planning and do not fully comprehend its significance in
community planning. Thus education planning is often done without considering the community in which the school operates.

There is a strong need for new ways of managing the education enterprise and for a more strategic approach to education planning. In recent years, dozens of observers in the United States have called for school reform, and numerous school systems have responded with school improvement programs. Many who study the improvement process believe that the most important improvement a school or school system can make is "to develop a permanent capacity for change, a capacity that would allow the school system continually to improve itself and to respond to the changing needs of both its students and the outside world." This capacity should consist of the development of a planning group of school staff members, community and district representatives, and an agreed-upon process for articulating student needs and designing and implementing changes to meet them. It also requires of the planners an awareness of the interconnectedness of all aspects of education and a planning process that takes this interconnectedness into account.

A state-of-the-art approach to education planning that recognizes the role that the community plays in shaping education and builds on the American community education movement has been developed that can guide educators and urban planners. It recognizes that public education is both central to the quality of life in a community and sensitive to community forces over which the schools have traditionally had little control. Community-based in scope, the approach:

- is driven by the community's values and goals for public education;

- examines the relationships between the school system and various other subsystems that comprise the community -- the housing market, the economic structure, labor market, land use patterns, fiscal and physical infrastructure, and transportation system;

- takes into account the local, regional, and national policy decisions that affect the community subsystems, and the schools; and most importantly

- brings together educators and community leaders, focusing their attention on the educational future of the students and the needs of the community.
The Approach: A Community-based Comprehensive Planning and Policy Analysis Process for Planning for Schools

This approach is a synthesis of nearly two decades of prior work, originating in urban planning concerns that comprehend normative planning methods in school systems planning. More than fifteen community based planning studies for local school systems in the United States. Out of these studies has evolved a general set of procedures that involves an interdisciplinary study team, sophisticated forecasting and analysis methods, and active school committee participation in a group decision making process to aid the planning process. The underlying notion is that public schools are an integral part of the community. As such, schools support and influence other community systems and are in turn influenced and supported by them, in an interactive process. Education planning requires the assessment of these interactions and the understanding of the policy constraints that affect the community and the schools. It recognizes that public education is both central to the quality of life in a community and sensitive to forces over which the schools have traditionally had little control. It examines the relationship between the school system and various other systems that comprise the community; takes into account the local regional, national, and international policy decisions that affect the community and the schools and involves multiple data bases, sophisticated forecasting methods. Its goal is to help such systems make decisions about particular planning problems and enhance overall capacity to conduct comprehensive planning studies in the future. This section of the working paper will detail this innovative approach by presenting the conceptual framework, diagramming its component parts and indicating the flow of the planning and policy process. The next section will illustrate the application of this approach, using a recently completed study in Stamford, Connecticut. It will also indicate the replicability of this approach.

The Policy Framework:

The public policy question which frames these studies is typically:

WHAT WILL BE THE SHAPE OF COMMUNITY IN THE YEAR 2000, AND HOW WILL THAT IMPACT THE PUBLIC SCHOOLS?

The specific questions for the education planner to address are:

1. What are the community's fundamental values and goals for their children, as viewed through public education goals and objectives?

2. What values and goals do we wish to instill in our
What skills and knowledge to prepare them for the future?

3. What are the local and regional trends in demography, socio-economic patterns, labor market, housing patterns and migration that will affect the size and composition of the public school enrollment and the students' educational needs?

4. What are the local, regional, and national policy issues that will affect the size and composition of the public school enrollment and the students' educational needs?

4. Given the size and character of the anticipated public school enrollment, the future economic base and estimated labor market, and the housing and migration patterns which emerge from this interaction, what are the implications for the school systems' curriculum, programs, staffing, facilities, equipment, and fiscal requirements?

The comprehensive approach is based on the notion of the interrelationships of fundamental elements comprising a community in which the assertion is that planning for schools is demographically driven. Exhibit One, the diagram below indicates the flow of interactions in the fundamental relationships in this paradigm:

Exhibit One

The Comprehensive Paradigm

Demographic Changes

Economic Shifts

Technological Innovation

Spatial Distribution

Land Use

Housing

Natural Environment

Transportation Change

World View Values Shift
The comprehensive paradigm is based on an understanding that change can be measured through assessing the inter-relationships linking the community: environment, population, economics, labor market, housing, land use, infrastructure, transportation, education systems, fiscal. These variables and the trends each generates are circumscribed by policy decisions at the local, state, regional and national levels, public and private, which in this model are characterized as world view values. This state of the art approach is grounded in this paradigm.

The analytic elements of the community-based approach to education planning are displayed in Exhibit Two, which identifies the three major components of the analysis and their variables: the contextual elements and trends, the policy variables and the outcome elements of impact.

Exhibit Two

Analytic Elements of the Comprehensive Community-Based Approach

<table>
<thead>
<tr>
<th>The Context: City/State/Region</th>
<th>City/State/Federal/Private Policy Decisions</th>
<th>Elements Impacting Public School System</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Environment</td>
<td>- Zoning Ordinances</td>
<td>- Enrollment</td>
</tr>
<tr>
<td>- Population</td>
<td>- Comprehensive Plan</td>
<td>- Curriculum</td>
</tr>
<tr>
<td>- Economics</td>
<td>- Local ordinances on</td>
<td>- Educational Programs</td>
</tr>
<tr>
<td>- Labor market (employment)</td>
<td>- Condominiums</td>
<td>- Support</td>
</tr>
<tr>
<td>- Housing</td>
<td>- Rent Control legislation</td>
<td>- Services</td>
</tr>
<tr>
<td>- Educational System</td>
<td>- State Fair Housing Laws</td>
<td>- Human Resources</td>
</tr>
<tr>
<td>- Land Use</td>
<td>- Local fiscal policies</td>
<td>(Staff)</td>
</tr>
<tr>
<td>- Infrastructure</td>
<td>- State Economic Development</td>
<td>- Facilities</td>
</tr>
<tr>
<td>- Transportation</td>
<td>- State Department of Education policies</td>
<td>- Equipment</td>
</tr>
<tr>
<td>- Fiscal</td>
<td>- Union Contracts</td>
<td>- Fiscal Resources</td>
</tr>
<tr>
<td></td>
<td>- Public vs Private Schools</td>
<td>Local</td>
</tr>
<tr>
<td></td>
<td>- Role of Federal Government</td>
<td>State</td>
</tr>
<tr>
<td></td>
<td>- Tax Changes</td>
<td>Federal</td>
</tr>
<tr>
<td></td>
<td>- Private Decisions</td>
<td>Private</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relationship with other systems</td>
</tr>
</tbody>
</table>
The context for schools, the city/state/region environment, are those systems which are external to the public school system but significantly impact its shape and are significantly impacted by it. They include:

**Population**
- The population as characterized by its major descriptors: age, sex, race, ethnicity, family and household type.

**Socioeconomic**
- Social and economic characteristics of the population.

**Labor Market**
- The economic environment, including employment and labor force trends.

**Economic Structure**
- All sectors: profit, corporate, business, public, non-profit.

**Housing**
- The study of growth and change in the supply of housing.

**Land Use**
- An inventory of existing land uses and an assessment of implications for the future.

**Transportation**
- Recent and anticipated changes which may impact highways and airport facilities.

**Fiscal**
- The sources and uses of public revenue and its relationship to public education.

**Infrastructure**
- Public utility services which influence the nature and pace of growth of the community.

**Social Indicators**
- Measuring change in the community by demographic and socio-economic data.

*These describe the demographics.

The city and federal policies are those public and private decisions on key issues which will influence the shape and direction of the contextual trends. While specific policy issues differ for each community, some more general policy issues are described in Exhibit Three. The school system is composed of a finite general set of internal elements, listed, which are impacted on by the external elements.

The interrelationships of the analytic elements diagrammed in Exhibit Two are the basis of the planning and policy analysis approach for assessing public education demand and characteristics of need. The relationships of these three
Exhibit Three

The Conceptual Framework

The interaction of these contextual elements and the policy decisions, while unique for each community, nonetheless illustrates a more general paradigm of interrelationships and outcomes in Exhibit Four.

Exhibit Four

General Paradigm
The Community-based Planning and Policy Analysis Approach to Public Education Planning

The interactive relationship between the various contextual elements in the community, public policies, enrollment forecasts, and educational directions of the community-based approach to educational planning is displayed in Exhibit Five. The framework suggests that forecasting the size and composition of the public school enrollment, specifying at-risk target populations, and identifying future curriculum and program direction depends on understanding the local community context and the policies that might affect the local community. Understanding the future population and the community context is critical in determining the educational needs of students and others, which in turn sets the direction for school planning.

Applying this approach to the local school district requires consideration of a large number of variables as illustrated in Exhibit Five. The framework shows, first of all, that the key to sound education planning is accurate projections of the population and public school enrollment, as well as information regarding at-risk groups. Such projections cannot rely solely on population statistics, since community variables such as changes in the housing supply, improvements in the transportation system, and expansion or shrinkage of industry may modify a community's population over time.

At the same time, shifts in policy at the federal, state, or community level may likewise affect population projections. If, for example, rent control is abolished or business tax incentives are altered, there might be a change in the type of housing available or a different mixture of business and industry, in turn changing labor market conditions and attracting different segments of the population. Changes in zoning restrictions similarly affect housing and business conditions, again with important implications for the community's population.

But perceptions of a community's educational needs are not based solely on projected enrollment. Community variables, policies, and trends also have an important direct influence. Shifts in the ethnic composition of parents may result in corresponding shifts in program demands for their children. Changes in the businesses and industries that draw labor from the community may suggest a need for corresponding changes in the school curriculum to match labor requirements. Advances in education research or technology may also affect perceptions of educational needs. One recent example is the rapid growth of micro-computers, which has sparked widespread proliferation of computers in the classroom and demand for computer literacy among both youth and adults.
Once all the contextual and policy variable has been considered, a reasonable estimate of the size and composition of the population to be served by the schools can be projected. Then the educational implications of these findings can be addressed by exploring these questions:

- What curriculum thrusts and programs will assist students in staying in school, in accessing post-secondary education, and in entering the new world of work?
- How can schools support community education, providing early childhood education, offering adult education courses, serving senior citizens, providing after-school or full day care programs and otherwise expanding opportunities for the community as a whole?
- What support services are necessary to encourage students and others to take advantage of the new curriculum thrusts and programs?
- What kind of human resources are needed to carry out the new thrusts?
- What sort of facilities and equipment will be most responsive to the educational needs of the students and others?
- How will districts pay for the changes?

The answers to these questions, although informed by the perceived needs, will be heavily shaped by the values and goals of community members. In reaching decisions about the short- or long-term future of education in a community, it is important to tap the perspectives and opinions held by community members representing a range of demographic and economic conditions, political interests, and constituencies.
Community-based planning provides a unique opportunity for various sectors in the community to work together to develop plans for the schools and to see how educational planning affects other subsystems in the community. Increased coordination during the planning phase can have long-range benefits for implementation of program change. It can also help develop local capacity for community-based school planning in the future.

**Application of the Approach**

In practice, there are three contributing groups in the community-based planning process. First, an **interdisciplinary team** of city planners, educators, demographers, economists, and policy specialists in housing and finance, is assembled to direct the assessment of contextual and policy variables and to forecast the outlook for the community. Second, a **management team** of school and municipal administrators and teacher representatives meets regularly with the interdisciplinary team. Third, the approach depends heavily on **community participation** in the planning process. A Citizens' Advisory group is appointed and open Citizens' meetings are held regularly to obtain input into the planning process and feedback on the findings. Agencies and community groups who are concerned with youth are also brought together to interpret the data and comment on the emerging policy design. While the interdisciplinary study team provides data and serves as the catalyst for the planning process, recommendations are ultimately forged by school and municipal staff and community members.

While each study is somewhat distinct, the procedure follows a general set of steps, outlined below:

- Initial Problem Identification
- Establishment of the Decision-Making Process
- Analysis of Data
- Assessment of the Educational Implications of the Projections for the School System and the Community
- Capacity building of the education planning process

**Stage One - Initial problem identification**

In some cases, the interdisciplinary team is asked to help find answers to a specific set of policy questions. Should a new school be built? Where to locate a new magnet school program? How to plan a new school facility? How many staff will be needed over the next decade? In other cases, school system officials
**Stage One -- Initial Problem Identification**

In some cases, the interdisciplinary team is asked to help find answers to a specific set of policy questions. Should a new school be built? Where to locate a new magnet school program? How to plan a new school facility? How many staff will be needed over the next decade? In other cases, school system officials may have a number of questions they want addressed or lack of clear formulation of a specific question or set of questions. In these cases, problem specification may take longer.

**Stage Two -- Establishment of the Decision-Making Process**

The process of planning is a participatory one. From the beginning, a procedure must be established whereby teachers, administrators, ancillary staff, parents and other community members work together to help understand the data prepared by the interdisciplinary team and translate the information into local policies and programs. The effect of this stage is two-fold: to supply technological assistance to school systems in making the best use of available data for educational planning; and to involve professional staff and community representatives in interpreting those data and making appropriate educational decisions. The specific structures are naturally tailored to local conditions, but generally involve:

- the active involvement of central administrators in the planning process;
- the establishment of a study advisory committee comprised of community and professional representatives. A second "in-house" response taskforce of both central administrative staff and school-level representatives in a consultation process.
- an intensive set of meetings; and
- a vehicle for sharing results with remaining staff and with parents and other community members.

**Stage Three -- Analysis of Data**

The major technical challenge of the work is at this stage of the study. Identified data sources must be assembled into a data base, analyzed, relationships constructed, and synthesized in a manner that lends itself to educational decision-making.

A number of analytic tasks must be accomplished at this stage:

1. Define and describe the geographic units to be studied. At a minimum, four or five geographic units are usually assessed, and these units usually build upon each other. They are in reverse order of size: census
tracts, neighborhood planning districts, school attendance areas, school district or districts, metropolitan area or county, state, and federal.

2. Describe and analyze the current and past demography and other characteristics of each geographic unit selected in the community and the surrounding region including: population characteristics, socio-economic characteristics, housing patterns, labor market conditions, land use, fiscal trends, transportation, and other system components.

3. Identify the communities educational values.

4. Describe and analyze current and past demography of the public school system as a whole and by school attendance area, as well as by independent and church-related school.

5. Describe and analyze current educational programs and support services and the needs/desires of the current student body.

6. Identify and analyze local, state, regional and/or national policies that may affect enrollment forecasting and that will assist in educational planning.

7. Develop population projections which will forecast school-age populations and public school enrollment that will target at-risk students and will be sensitive to alternative assumptions about demographic and other factors.

Much of the technical work for subtasks involves specification of appropriate variables and gaining access to the relevant data. Basic descriptive statistics are used to describe current population characteristics and characteristics of the surrounding community. Understanding the local policy setting requires intensive familiarization efforts, including interviews with government representatives, review of the local press, review of key planning documents and other investigative activities.

**Stage Four -- Assessing the Educational Implications**

Assessing the Educational Implications of the enrollment projections for the school system and the community by quantification and qualification of the at-risk populations and identify needs in curriculum, direction, support programs, staffing and facilities.

The descriptive analysis of the demographic, economic, labor market trends, housing patterns and policy concerns upon which
the future projections will be based yield a rich set of information about the nature of the student population and its expected changes over the next decade or so. In some cases, this information will help answer the primary study question What are the implications of projected change in the community for the schools? What will its composition be? Is the student population expanding or declining? At what grade levels? As well as What are their "educational needs?" For example, if the student population is shifting in the direction of more immigrant students from diverse cultures, there may be a need for supplementary instruction in the English language, for curricul which explores the basic government and functioning of the nation, and for sensitivity to different cultures in the core curriculum. If housing conditions are crowded and equipment in the home inadequate, schools may need to consider extended-day programs that allow students study time, space, and quiet after school hours.

As part of stage four, the study staff meets regularly with district representatives to discuss the data, help them set priorities for program planning and set up an action agenda based upon the results.

Stage Five - Recommend Ways in which the education planning process can be continued

A goal of this approach is empowerment. One way is to help school systems develop the in-house capacity to collect and monitor environmental, demograhic, economic and policy trends over time, and to apply this knowledge to assessments of school enrollment and educational needs. It is questionable, however, whether school systems have either the technical expertise or the time to devote to such an endeavor. An in-house information system that can be used by school staff for planning can be developed. In the process, the team sensitizes district administrators to the kinds of data that must be considered. Thus, at a minimum, school systems will become better consumers of services offered under the general rubric of educational planning.

Stage Six - Measurement of Effectiveness

The study team evaluates its project by asking:

o whether the school system used the planning data to go beyond the original stated objectives for participation;

o whether the school system acts upon any of the policy or program recommendations that emerge from the planning process;

o whether the school system makes an effort to
institutionalize any or all aspects of the general approach to planning;

- whether the school system request successor projects; and

- whether the findings are proven valid over the long-term.
Part II

A CASE ILLUSTRATION: STAMFORD PUBLIC POLICY IMPACT ANALYSIS

Introduction

Unlike any community of comparable size in New England, Stamford, Connecticut has undergone vast changes in the past quarter of a century. These changes, which have occurred in the urban systems which comprise the context of planning of the public schools, have begun and will continue to alter the character of the Stamford Public Schools. (Urban Systems: physical policy environment - land use, housing, open space, transportation, and infrastructure, environment; Social and Economic policy environment - population, social characteristics, economic structure including labor market and the changing structure of jobs and fiscal analysis)

Stamford, in 1950 a sleepy exurban community with train service to New York City was a bedroom town, and an upper middle class white collar enclave. By 1970 the City had begun to decline in population, remaining at about 100,000 population through 1980, and most significantly for public school planning, the composition of those remaining had substantially changed. From a family oriented small town, by 1980 Stamford was the home of a number of American Corporations, and its school age population of 519 had decreased over 26 percent. Racially and ethnically, the population had shifted as well; in 1980 about 80 percent of the population was white, 15 percent Black, and 3.5 Hispanic. Social and economic indicators showed that the City population was becoming less homogeneous and more polarized: an older population in the white community, 36.4 years and 25 years in the minority community. Education and income were similarly profiled. The transformation from a town into an urban community has brought a shift in land use to corporate office space; an increase in the construction of multi-family dwellings, primarily condominium; a tight expensive housing market; a dramatic increase in commuters into the city and out of New York; a switch in retail trade from local to regional shopping which led to a new visual profile - exciting, but congested; and a contested municipal fiscal base with an erosion of public support for education. These changes in land use and concurrent shifts in the economic and residential structure are buttressed by municipal planning and zoning policies as well as key decisions by the private sector. Advances in educational technology and basic changes in federal and state roles in education, and a spurt in the growth of private schools, are some of the other policies which impact upon the future of public education.
The two-year interdisciplinary study documented these policy changes, at the request of the Superintendent of Schools (and bitterly resented by the Mayor and City Planning Board), and examined their impact on the future of public education. The major policy question was: What will the City of Stamford be like in the year 2000, and how will it impact the public schools? This then became: What are the priorities that the Stamford Public Schools should address in revising its educational thrust to meet the demands of the year 2000? The findings of the study are a sense of direction for the community and the schools, an identification of the specified target populations for future school enrollment, identification of policy options for the public schools -- the development of curriculum and programs which respond to the trends, recommendations for facilities and equipment needs.

Included in the activities undertaken to complete the study and present its recommendations are:

- an examination of educational policy trends and their implications for Stamford
- an assessment of the city's Master Plan and its amendments through an examination of its holding capacity study to gauge the impact of its policies upon the school system
- a housing market analysis which studied the re-use potential of the current housing stock to identify areas where upgrading of zoning may increase or decrease the total population
- a determination of the cost of housing for renters and owners
- an examination of the labor markets operating in Stamford for their effect upon the school system in terms of their dependent impact upon the housing market and the municipal finance system as well as their impact upon educational programs, services, and facilities
- an evaluation of the municipal fiscal environment in the City by comparing the relative cost of educating students in Stamford against other cities and towns, and by assessing the quality of educational outcomes
- a forecast of the demand for public educational services needed to prepare Stamford students to function effectively in the work force
- an assessment of the school system's present strengths, weaknesses, and problems
- an assessment of the facilities and equipment available today and in the future
- recommendations for curriculum directions, facilities needs and equipment demand

Application of this Approach for the Stamford Public Schools
Planning for public schools begins with an understanding of the context for education, that is, those factors which influence the nature and direction of public education. The Stamford Educational Public Policy Impact Study identified and studied six major systems which impacted on the city's learning institution -- population (social indicators), land use (including environment and infrastructure), housing, the economy/labor market, transportation, and the city's fiscal situation.

The approach is a way to organize contextual trend data and policies in order to assess their impact on the future of public schools -- their enrollment size and composition and their student needs. The approach blends comprehensive and participatory planning methods and public policy impact techniques.

THE PROCESS:

- comprehensive planning paradigm showing how the sub-systems of a community interact with the education system elements;
- policy framework which assesses the key issue areas in the policy environment;
- community participation throughout the study and implementation process;

TO IDENTIFY:

- Future School enrollment, size and composition.
- Target populations within the enrollment forecast
- Student education and support service needs

TO RECOMMEND:

- Curriculum Directions
- Support Services
- Staffing and Human Services
- Educational Programs
- Facilities and Equipment

By exploring the implications of policy across these six areas and measuring changes as manifested in analyses of demographics, housing and land use patterns, fiscal and economic indicators and labor market data, the study addressed the impacts of change on the future of public education in Stamford.

The following demonstrate how interrelated study elements can be: the nature and requirements of the Stamford labor market (themselves indicating needs for educational programs) influence and are influenced by the type and range of available housing. In turn, housing patterns have a decided effect on the city's resident population, which, in turn again, determines in
significant measure, enrollments and program requirements in Stamford public schools.
PUBLIC POLICY QUESTION: WHAT WILL THE CITY OF STAMFORD BE LIKE IN THE YEAR 2000 AND HOW WILL THAT IMPACT THE PUBLIC SCHOOL SYSTEM?

STRATEGIC PLANNING QUESTION: WHAT ARE THE PRIORITIES THAT THE STAMFORD PUBLIC SCHOOLS SHOULD ADDRESS IN REVISIONING ITS EDUCATIONAL THRUST TO MEET THE DEMANDS OF THE YEAR 2000?

STEP ONE Overview of Two Year interdisciplinary study:
Phase One: Impact Analysis
Phase Two: Scenario Analysis
Phase Three: Facilities Study

STEP TWO Planning Tasks established by the Superintendent of Schools
Task 1 Assessing Student Needs
Task 2 Evaluating Student Assignments
Task 3 Program Review, Evaluation and Development
Task 4 Budget Analysis
Task 5 Assessing Future Conditions

Each included the identification of the policy issues involved.

STEP THREE Stamford's Educational Public Policy Impact Analysis:
Elements of Impact
Team began by blocking out the three major components -
One - City/State/Regional Environment/Context
Two - City/State/Federal Educational Policies and Trends.
Three-Stamford School System; Elements of Impact

Process - Data Collection; Development of Information Systems

STEP FOUR Stamford Elements of Impact II. After the initial data collection and information systems development, a first cut of the possible relationships among the key subsystems was developed. At this time, the population changes were keyed as the key variables in characterizing and forecasting enrollment and educational needs.

Process - Policy Analysis

STEP FIVE After an extensive issue identification and policy review, a sector analysis was developed which related planning data trends to policy constraints, i.e. housing pattern and changes to master plan, zoning code and housing code; then state transportation plans and
coastal zone requirements to environmental concerns and access to the city; federal educational and tax legislation and finally, in the private sector, housing market and corporate firm relocation and employee housing policies directly relate to the future size and composition of students. This figure summarizes the sector analysis in which the housing market emerges as the controlling element for forecast purposes rather than the initial hypothesis of natural increase.

Process - Integration of data/trends and policy constraints

STEP SIX After a close examination of interactions between trends and policy decisions, a final analytic framework was developed which highlights the findings of the research. This figure summarizes the interrelationship of critical public policy impact elements with education and the schools. The housing pattern -- the outcome of the economic and demographic trends, the city's land use policies and local zoning codes and the private mortgage and development market, stands chief among the factors that affect school enrollment. The next important variable is the demographic characteristics of the population, measured by social indicator analysis, which determines the staffing pattern and educational programs by identifying the needs and desired of the Stamford student.

Process - Population Forecasting; Discrepancy Analysis

STEP SEVEN Elements of Impact III. A cross-check on the analytic framework by flipping over the independent variables to be the School System and the dependent variables, the elements of impact, the systems of the City.

Process - Reality Testing, Community Input

STEP EIGHT Consultation Process: an exchange process. While the secondary data/policy process was taking place, a substantial community participation exchange occurred (monthly or more often) which tested the assumptions and relationships found in the analysis. A close identification of student needs was initiated posited on this data, in particular student input.

Process - Scenario Building

STEP NINE Future Direction for the Stamford Public Schools: Policy Impact Schema. A policy impact schema which
grouped the contextual trends and policy areas and indicated the interconnectedness between the data systems to a scenario analysis which produced:

FINDINGS:  - Future Target Populations  
           (size and composition)  
           - Educational Implications for Curriculum  
             and Support Services  
           - Facility and Equipment Needs

STEP TEN  Strategic planning process which set priorities for programs and facilities and prepared implementation plans for:

- Curriculum Development
- Staffing Plan
- Facilities Plan
- Attendance Area Plan
- Operational Budget
- Capital Budget
STANFORD PUBLIC POLICY STUDY: CONCEPTUAL FRAMEWORK

1. Study Components: Three Phases

<table>
<thead>
<tr>
<th>Study Components</th>
<th>Phase One: Impact Analysis</th>
<th>Phase Two: Scenario Analysis</th>
<th>Phase Three</th>
<th>Final Report, August 30, 1982</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase One</td>
<td>Stage One</td>
<td>Stage Two</td>
<td>Stage Three</td>
<td>Facility Study</td>
</tr>
<tr>
<td>Issue &amp; Analysis, Data Collection, Analysis and Projection (A &amp; B)</td>
<td></td>
<td></td>
<td></td>
<td>- Population projections</td>
</tr>
<tr>
<td></td>
<td>Policy Assessment (D)</td>
<td>Discrepancy Analysis (C)</td>
<td>Intensive Impact/ Issue Analysis (D)</td>
<td>- Supply demand analysis</td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>- Assess educational policy trends</td>
<td>- Forecast the demand by stratified characteristics for educational services</td>
<td>- Three scenario analysis - Recommendations</td>
</tr>
<tr>
<td></td>
<td>- Social Data</td>
<td>- Public vs. private schools</td>
<td>- Coordinate with Educational Committee study of community values, aspirations and ideals about education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Land Use</td>
<td>- Role of federal government</td>
<td>- Develop a social indicator model to assist in the identification of student needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Housing</td>
<td>- Role of state</td>
<td>- Assess school system's present strengths, weaknesses, and problems in light of demand projections</td>
<td>Dec. 1982</td>
</tr>
<tr>
<td></td>
<td>- Open Lands</td>
<td>- City of Stanford Master Plan and Amendments</td>
<td>- Forecast and analyze the impact of the trends in Phase I on the future of public education</td>
<td>- Add all results of status reports</td>
</tr>
<tr>
<td></td>
<td>- Transportation</td>
<td>- Racing and sub-division codes</td>
<td>- Assess the impact on enrollment, education program and services, fiscal resource, facilities and relationships with other agencies</td>
<td>- Develop a final report highlighting the information base and the findings</td>
</tr>
<tr>
<td></td>
<td>- Environment</td>
<td>- STEP</td>
<td>- Meet with appropriate decision makers to indicate how this report can be utilized to develop strategies of implementation</td>
<td>- Provide a foundation for public policy decisions</td>
</tr>
<tr>
<td></td>
<td>- Economic</td>
<td></td>
<td></td>
<td>- Recommend</td>
</tr>
<tr>
<td></td>
<td>- Labor Market</td>
<td></td>
<td></td>
<td>- Recommendations</td>
</tr>
<tr>
<td></td>
<td>- Occupation</td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>
### Figure I-One

Stamford's Educational Public Policy Impact Analysis:

**Elements of Impact**

<table>
<thead>
<tr>
<th>City/State/Regional Environment (Context)</th>
<th>City/State/Federal Educational Policies and Trends</th>
<th>Stanford School System: Elements of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>STEP - Stamford Educational Plan</td>
<td>Enrollment</td>
</tr>
<tr>
<td>Employment</td>
<td>Tax Policies and Incentives</td>
<td>Educational Programs and Services</td>
</tr>
<tr>
<td>Land Use incl. Envir.</td>
<td>Instructional Technology</td>
<td>Financial Resources</td>
</tr>
<tr>
<td>Housing</td>
<td>Role of Federal and State Government in Education</td>
<td>Human Resources</td>
</tr>
<tr>
<td>Transportation</td>
<td>Public vs. Private School Issues</td>
<td>Relationship with other Systems</td>
</tr>
<tr>
<td>Fiscal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Preliminary Report, April 30, 1982

Conceptual Framework II
Figure I

ELEMEINS OF IMPA CT II

CONTACT

FINANCIAL (SCHOOL)

INCOME

AGE

POPULATION CHANGES

SOCIAL INDICATORS

LAND USE
ENVIRONMENT
TRANSPORTATION

HOUSING MARKET

LABOR MARKET

FINANCIAL (CITY)

ENROLLMENT

PROGRAMS

STAFF

FACILITIES & EQUIPMENT

CONCEPTUAL FRAMEWORK III

Final Report, June 30, 1982
STANFORD PUBLIC POLICY STUDY: CONCEPTUAL FRAMEWORK
Model III.

ANALYTIC MODEL

CONRAINTS UPON ENROLLMENT

LABOR MARKET

HOUSING MARKET

LAND USE POLICIES
ENVIRONMENTAL CONCERNS
PRIVATE SECTOR FISCAL
POLICIES
PUBLIC SECTOR FISCAL
POLICIES

ENROLLMENT
NUMBER AND
COMPOSITION

EDUCATIONAL
PROGRAMS AND
STAFF
FACILITIES

Sector Analysis: October 1982
Conceptual Framework
Figure I-One

Analysis
Identification of Critical Public Policy Impact Elements

**Housing Market**
- Land use policies
- Open space
- Infrastructure
- Financial constraints

**Population**
- Social indicators

**Economic/Employment**
- Land use policies
- Transportation

**Fiscal**
- Competitive markets
- Tax rate
- Proportion of budget spent on schools

**School System**
- School enrollment
- Human resources
- Educational programs/services
- Facilities/equipment
- Financial resources
Model 3

School System

- Enrollment

- Curriculum
  - Educational Programs
  - Staff
  - Facilities
  - Equipment
  - Support Services

- Fiscal

Stamford

- Population
- Housing Market
- Land Use Changes
- Educational Policy Changes

- Social Trends
- Labor Market
- Discrepancy Analysis
- Educational Technological Trends

- Financial
STANFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Figure III-Two

CONSULTATION PROCESS

Study Team

Identify goals and objectives → Analyze School System needs → Define and develop Scenarios

EXCHANGE PROCESS INTERVIEWS

Community

Identify goals and objectives → Articulate issues and concerns → Suggested solutions

Assessment of project's student need for educational services in Stamford public schools
FUTURE DIRECTION FOR THE STAMFORD PUBLIC SCHOOLS
Policy Impact Schema

CONTEXT/POLICIES

Demographic
Social Indicators
Housing Market
Land Use
Transportation
Labor Market

Consultation
Process
Career Trends
SAT Interest Areas
Educational
Technology

Consultation
Process
Student Assignments
Special Programs
Student Needs
Space Needs

Scenario Analysis

SCHOOL SYSTEM

Target Populations
Educational
Implications

Education Priorities
Curriculum Direction
Program Priorities

School Building
Priorities

January 1983

Conceptual Framework
STANFORD EDUCATIONAL PUBLIC POLICY IMPACT STUDY

Figure III-One
ASSESSMENT OF PROJECTED PROGRAM NEEDS
FOR STANFORD STUDENTS

Flowchart   September 30, 1982
Conceptual Framework
TIMELINE FOR COMPREHENSIVE EDUCATIONAL PLANNING

Summary of Pre-Planning Data → Priority Identification → Staff and Committee Assignments → Curriculum and Program Design

Student Assignment Plans → Staff Requirements → Operating Budget

May 15

Facility Needs → Capital Budget

May 30

Adoption of Comprehensive Educational Plan → Development of Implementation Plan

November 1982

Flowchart, planning and implementation
The author of this paper is Dr. Marcia Marker Feld, an education systems planner who recently completed an appointment as Visiting Scholar at the Graduate School of Education, Harvard University, and Professor-in-Residence, the Education Development Center. Dr. Feld, who received her doctorate in city planning at Harvard University, has specialized in education systems planning. Her recent major planning and policy studies include: Study Director, North Kingstown (Rhode Island), Educational Public Policy Impact Study, an analysis of the impact of regional trends on public education enrollment for 5-10 years; Study Director of the South Providence Elementary Schools Desegregation Plan, a project which predicted the enrollment and spatial distribution of school age population by size and composition and recommended magnet elementary schools in basic skills, high technology and international trade; Study Director of a two-year Policy Impact Analysis for the Stamford Public Schools. In addition, she has been Study Director for a demographic analysis for an urban suburb near Boston, Brookline, Massachusetts. Her earlier work included staff for Mayor John Lindsay's Office of Education Affairs, New York City, and Executive Director of the Metropolitan Planning Project, Newton, Massachusetts.

Dr. Feld, is currently . Associate Professor of Community Planning at the University of Rhode Island and Executive Director of their Urban Field Center. She has published extensively in the field of education planning.
Planning and Public Policy Reports by Dr. Marcia Marker Feld

1. **Education Park Study**, Corde Corporation (February 1967)

2. **The Location of Early Childhood Education Centers** for Mayor Lindsay's Office of Educational Affairs (November 1968)


4. **Citizen Participation in Urban Education Planning** (Unpublished Doctoral Dissertation), Harvard University, (1972)


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7. **Ten Years Later: Metroways to Understanding** (1983)

8. **On the Feasibility of a Grade Level Reorganization for the Providence School System**
   
   Volume I (1979)
   Volume II (1980)
   Volume III (1982)


9. **Stamford Educational Public Policy Impact Analysis**
   
   Volume I (1982)
   Volume II (1982)
   Volume III (1983)
   Volume IV (1983)

10. **Stamford Educational Public Policy Update** (1984)


12. **St. Louis Public Schools High School Magnet: Management, Law and Public Policy** (1985)


Volumes I, II, III


On-going Technical Assistance Projects

University-School Partnership Program, Evaluations, Documents, Proposals (1978-present)