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**An Examination of Factors Controlling the
Location of Commercial and Industrial
Development within the Metropolitan Area**

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Prepared under contract #: C-93-32 for the Metropolitan Council.

The following report is the second of three research projects focusing on factors affecting the socio-economic vitality of the Fully Developed Area (FDA) in context with overall development patterns of the Twin Cities Metropolitan Area. Principal Investigators for the contract are Thomas Luce, Humphrey Institute of Public Affairs; Herbert Mohring, Department of Economics; and Barbara Lukermann, Humphrey Institute of Public Affairs and Center for Urban and Regional Affairs. Douglas Snyder, Department of Landscape Architecture, provided research assistance to the projects.

CURA has supported the work of the authors of this report but has not reviewed it for final publication. Its content is solely the responsibility of the authors and is not necessarily endorsed by CURA.

June 1993

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EXECUTIVE SUMMARY

The report examines forces that direct the location of commercial and industrial development within the Twin Cities Metropolitan Area. Its purpose is to gain insights for policy direction to sustain the economic vitality of the Fully Developed Area (FDA) as the region continues to grow in population and expand physically.

The literature and local empirical research acknowledge that investors and other decision makers evaluate three sets of factors in reaching their goal of maximizing profits and minimizing risk or uncertainty: (1) relative accessibility within a regional marketplace; (2) site characteristics; and (3) improvements that include infrastructure and ancillary uses on which the new use depends.

Land in commercial and industrial use in the seven-county metropolitan area increased from 59,550 acres to 73,920 acres between 1980 and 1990. Over 9,000 of the 14,000+ acres were absorbed in the developing communities; 3,700 acres in the Rural Areas and only 100 acres added in the two core cities.

GENERAL LOCATION FACTORS FOR INTRA-METROPOLITAN DECISIONS

A tally of the specific factors affecting commercial and industrial development and the competitiveness of the FDA follows. These factors operate in a current environment where: (a) the office market has been seriously overbuilt, with many large commercial projects in the central business districts and along the major freeways now valued well below their outstanding debt; (b) relatively slow growth in manufacturing and overbuilt speculative office/warehouse facilities; and (c) geographic dispersion of jobs outside the FDA, following population, purchasing power, site availability, excellent urban infrastructure and lower development costs.

- *Transportation, communication and energy technologies* - accessibility has always been the critical influence in shaping urban land use patterns. Access to (and visibility from) major freeways and arterials continues to be the key location factor. Older non-residential districts built in the rail-streetcar era decayed when their relative accessibility fell as the automobile became the dominant form of transportation. Telecommunication technology will likely permit wider geographical separation of functions in the future.
- *Environmental regulations and financial liability of owners of contaminated sites* - passage of the SuperFund legislation in 1980 significantly increased financial risk to lenders and investors. Reclamation of contaminated sites is extremely costly and redevelopment involves significant time delays in gaining permits. Identified sites in the metropolitan area are equally distributed between the FDA and the Developing Area (40% each) with remaining sites in the Rural Areas. However, Minneapolis and Saint Paul have by far the greatest number of contaminated sites.
- *Public incentives and subsidies* - tools of tax increment financing (TIF) and tax exempt bonding are available to both the FDA and Developing Area communities. Core cities or first-ring suburbs that use TIF for redeveloping sites must use their increments to cover demolition, site assembly costs, etc., whereas developing communities can use the same increment to write down land costs on "greenfield sites". This does not create a level playing field for the older communities. In addition, the major beneficiaries under Fiscal Disparities are now the Rural Areas and St. Paul.
- *Attitudes of lending institutions* - perception of risk will control access to long term debt financing with redeveloped sites generally involving higher costs and higher risk. Policies of lending institutions for working out loans/writing off losses on existing projects have become more important in an over-built commercial market suffering from major declines in property value. This factor

was important in Health Partners making its final decision to move to the Ceridian building in Bloomington.

- *Amenity and "quality of environment"* - commercial and industrial developers are increasingly seeking out amenity sites on the urban fringe. The campus setting of an OPUS or Carlson Corporation in the western suburbs is an amenity also sought by high tech industries, albeit at a much smaller scale. The FDA has far fewer competitive sites to offer. Smaller firms sought out the Chaska industrial parks because of the landscape setting.
- *Land availability and local zoning* - large open sites are essentially available only in the developing communities. The zoning and subdivision requirements of local municipalities are relatively similar in both the FDA and Developing Area -- less stringent in the Rural Areas. One industry, however, sought out Chaska because some outdoor storage was permitted.
- *Local and state taxes* - differential among the metropolitan municipalities in the average property tax rate was not cited as a significant location factor in our interviews. Statistics on average tax rates for the FDA, Developing Area, and Rural Areas for Fiscal Year 1992 showed very little difference - 121%, 120% and 116% respectively. However, there is a big difference between the minimum and maximum average tax rates - ranging from a low of 83% for rural centers to a high of 159% for the FDA. State and local tax rates are cited in the empirical literature as affecting the choice of location among different metropolitan areas, so this factor may not be ruled out entirely.

BARRIERS FOR THE FULLY DEVELOPED AREA

Many barriers do exist for the FDA communities in the commercial and industrial markets. Not only do they lack an inventory of vacant land to compete with the urban fringe, but they are faced with significantly higher development costs. These costs become astronomical when dealing with contaminated sites. Twelve barriers are listed below:

1. Lack of available land.
2. Environmental regulations.
3. Costs for reclamation of contaminated sites - avoidance by lending institutions because of ongoing liability to the owner (and under foreclosure to the lender).
4. Preference for high amenity sites.
5. Parking availability and its cost versus perception of "free parking" in the suburban communities.
6. Obsolete buildings in the FDA - construction standards give buildings a longer physical than functional life span.
7. Less need for physical proximity among the commercial and industrial firms.
8. Linkage of location decisions with where the decision makers live - primarily in the higher income suburban communities.
9. Greater uncertainty in getting approvals of a project from adjacent property owners - development projects often change the status quo for existing residents.
10. Availability of public subsidies for "greenfield sites" which can be used to write down land costs.
11. Increasing scale of convenience retail and thus far fewer grocery, hardware, drug stores, and specialty stores are needed to serve trade areas of a given size.
12. Political fragmentation and lack of a regional influence for guiding the market except through the regional infrastructure improvements.

LESSONS LEARNED FROM THE RESEARCH

Insights from our assessment of why decision makers select different parts of the metropolitan area for commercial and industrial uses can be divided into two types. Some are primarily "findings" from the data; others are conclusionary and suggest a reorientation of policy in the future. The findings are included in the summary above. The conclusions and preliminary recommendations are listed below.

Conclusions:

1. *Where the region places and how it prices its infrastructure will have a significant impact on the market.* These investments and programs/funds to facilitate recycling of our older industrial and commercial districts are levers to manipulate the market.
2. *The challenge is to allocate more resources to cope with the process of aging, changing technologies and obsolete investments in the FDA.* Existing tools of tax increment financing, fiscal disparities, and tax-free bonding are insufficient to balance the higher costs in the FDA. Existing tools are totally inadequate to redevelop contaminated sites.
3. *Lending institutions are key players in achieving the goals of maintaining vitality of the FDA.* New policies are needed to balance the higher risks in the FDA perceived by these institutions.
4. *Current over-building in the office and speculative light industrial market gives the region a breathing space to develop new policies to assist reinvestment in the FDA.* These can be instituted without necessarily constraining investments in the Developing Area.
5. *The ability to provide on-site and "free" parking for employees favors the suburban locations over many of the older commercial and industrial districts.* The solution may either rest in subsidizing parking in the older areas or allocating the parking costs to

employees where on-site parking is available to lessen the impact of this factor on location decisions. Minneapolis is currently providing a parking subsidy in the Central Business District as a way to quicken absorption of vacant office space.

6. *Political fragmentation and increased reliance on local property taxes to finance services contribute to problems of recycling the fully built areas.* Sharing of commercial/industrial tax base within the region is a very positive step toward equalizing resources, but is clearly inadequate to counterbalance the ever present advantages of urban fringe sites in a region well provided with highways, sewers and natural amenities.

INTRODUCTION

Concern has been expressed about the continued economic and social vitality of the Fully Development Area (FDA) of the Twin Cities metropolitan region and whether regional and local development policies are contributing to what the Metropolitan Council has termed "troubles at the core". This research focuses on how commercial and industrial entrepreneurs, public development agencies and local governments view the assets and liabilities of different parts of the region for their investments and how they create or respond to incentives to attract employment.

The research first examines the literature on factors influencing the location of commercial and industrial enterprises, with emphasis on the *intra-metropolitan location decisions*. At this micro scale, historical growth patterns, timing and location of public infrastructure investments, local land use polices, development regulations, local public fiscal decisions, and perception of decision makers on risk, amenity and convenience join the macro factors affecting the relative attraction of the Twin Cities in a national and international marketplace.

A second section presents a summary of metropolitan data on absorption of commercial and industrial land into the market between 1980 and 1990, the extent of environmental pollution creating development barriers, and an overview of key fiscal policies: tax increment financing, fiscal disparities and differentials in local property tax rates.

The third part of the research presents findings from a series of key informant interviews with a selected number of local decision makers for commercial/industrial projects and development of three local case studies. The case studies illustrate how decision makers have been influenced by the factors defined in the literature and how local communities use their resources to overcome some of the barriers.

LITERATURE REVIEW

Three traditional factors of location and relocation decision making have remained constant over time and geographic scale. They are the firm's relationship to the technologies of transportation, communication, and energy. Other factors impacting location decisions are state and local taxes, economic development policies, environmental law and regulation, and quality-of-life issues. There is still some disagreement on the importance of local taxes. Econometric studies support the premise that taxes are a factor in long-run growth, while survey and case studies are less certain of the impact. Economic development policies offering financial and other government incentives can be effective tools affecting a firm's decision to locate in a community. Environmental laws and regulations have increased risk for all parties of real property transfer, making the "recycling" of previously developed property less attractive and more costly than ever. The importance of quality-of-life as a factor in location decision tends to be sector-specific. It is relatively important for high technology firms and may be more important than traditional factors in location decisions. This sector views quality-of-life amenities as necessary to attract quality employees and to enhance the corporate image. In reality, location decisions based on quality-of-life factors tend to be a measurement of the lifestyle values of the chief executive officer and not necessarily of the firm's employees. In total, the literature suggests the factors important to location decision tend to place the FDA at a competitive disadvantage.

EVOLUTION OF THE CITY

As communities continue to evolve and respond to the needs and values of their inhabitants, so too do the geographic locations of their system components. Garreau¹ cites seven functions of cities: (1) industry, (2) governance, (3) commerce, (4) safety, (5) culture, (6) companionship, and (7) religion. The pattern of development is in part a reflection of cultural values. If we look at medieval cities we see reflected the need for safety. We find wall-enclosed cities with narrow defensible streets. Primary landmarks were likely to be the spires of great cathedrals, bastions and

roofs. It is a vertical place not meant to be easily accessible. Accessibility did not become important until cities became centers of commerce.

Borchert² defines cities as the assemblers and processors of the nation's resources. He goes on to say that the three most important determinants of geographic location of cities are technologies in the fields of transportation, communication, and energy. This is true across geographic scales and over time. Changes in the technology of transportation, communication, or energy are crucial to the growth or decline of cities and the location of industry and commerce within the community.

The emergence of the western European city (our closest relative culturally) as a system of public squares (marketplaces) and streets dates to a time when medieval towns began to acquire a political, economic and territorial identity. The medieval marketplace is worth noting because it usually was located at the center of town at the crossroads of the city's main highways, and was not associated with church or state. In other words, it was located where work-day activities took place and allowed the congregation of various business activities to take place.

The state-of-the-art mode of transportation, then as now, was a primary factor in determining the location of these marketplaces. As transportation shifted from foot to cart to horse-drawn wagon, cities expanded their sphere of influence. Streets needed to be wider and better kept if the flow of goods was to continue. It gave rise to a new secular place in the city identified with the everyday business of making a living and spending money. It meant also that a business or a residence now had direct permanent contact with the public and was related to a public place - the street. This eventually led to what we now know as the city, i.e., a CBD laid out on a rectangular street grid.

This is, of course, a gross over-simplification of city development. Blakeley and Ames, in their discussion of the changing urban context, point out several socio-economic factors currently affecting cities³. The perception of the central city as unsafe, unsanitary, and unlivable has

changed its fortune from the traditional planning-based notion that a central nodal pattern of development, focused on a central city, provided the greatest economic efficiency while creating social equality and economic opportunity to a new pattern of development composed of a system of communities with no controlling center. Furthermore city development is in response to the global market rather than national or regional markets. The twin forces of decentralization and internationalization are operating to redefine the spatial organization of our cities. International development planning requires greater communication between fiscal and planning institutions to provide the necessary facilities to stay competitive in the global economy. Transportation and communication technologies infrastructure will become increasingly important and must be designed to integrate the city fully into the international economy. For Blakeley and Ames, "*Urban* now *means a region*"⁴ with a communications capacity to barter in an international economy."

Another aspect in the decentralization of our cities is the privatization of what were once public spaces. Garreau refers to this phenomenon as Shadow Government. Blakeley and Ames call it limited access development. It controls internal and external market forces by curtailing impacts on land use from public policy, including forced racial or income integration. Its effect is to fragment metropolitan areas by class, race, and economic opportunity.

The latest chapter in the evolution of our cities is a result of the American land ethic.

We abuse land because we regard it as a commodity belonging to us.
A. Leopold, A Sand County Almanac (1949)

Culturally we exploit land⁵. Raw land, sometimes referred to as a "Blank"⁶, is first improved, then goes through a period of use, then becomes obsolete, and then finally is despoiled and/or abandoned. The old city cores now tend to contain the residue of obsolete physical plants because there currently is no good general provision or incentive for "recycling"

the resource of developed land when the initial development becomes obsolete.

In summary, the evolution of the city is important because it reveals three primary factors of location decision for commercial and industrial firms which have held true over time and across geographic scales. These are changes in the technologies of transportation, communication, and energy (and a cultural willingness to embrace them).

INTRA-METROPOLITAN LOCATION DECISIONS OF INDIVIDUAL FIRMS

Before discussion of the factors that firms use to select new locations, it is necessary to discuss why firms relocate. The primary reason is growth. Individual firms simply need more space to manufacture products or conduct business operations than is available at the current sites. The spatial tendency of Central Business Districts is vertical; while, in the Developing Areas the spatial tendency is horizontal. There is little question that the Fully Developed Area is at a competitive disadvantage when the primary need is for space, especially horizontal space.

There is a large body of research on the factors affecting inter-metropolitan or inter-regional commercial and industrial location decisions. The majority of the research deals with "traditional" factors such as the quality, availability, and cost of labor, proximity to markets and suppliers, local tax rates, or hard and soft costs associated with site development. Some research suggests that sectoral clusters develop their own set of traditional factors or that these traditional factors are growing less important in the face of non-traditional factors, such as state and local incentives or other economic development policies⁷. Quality of life concerns are often cited as an important factor. There is a less extensive body of research which looks at these factors from an intra-metropolitan location perspective.

Borchert⁸ distills these factors of geographic differentiation of land value within a metropolitan land market down to three basic factors.

- **LOCATION (a.k.a. accessibility):** It is the spatial location of the parcel in the circulation systems. These include transportation and communication networks and the flow of water and air (polluted or clean).
- **SITE (a.k.a. local resources):** These are the internal characteristics of the parcel, e.g. elevation, roughness, soils, mineral resources, vegetation, drainage conditions.
- **IMPROVEMENTS:** The modifications to, and adjacent to, the site so that it may be used for some purpose. It includes such things as buildings, other structures and infrastructure - sewer, water, and roads.

Cadwallader identified the major traditional location factors affecting the location of industry as proximity of raw materials, proximity to markets, transportation costs, energy, and the factors of production, i.e. costs which are associated with availability of land, labor, and capital⁹. A Metropolitan Council report¹⁰ on trends in industrial migration found that transportation and land availability are generally the most important factors in the decision process. Other factors cited as important in the decision making process were proximity to resources, proximity to other firms, and the availability of land and public services.

That is not to say that other factors do not impact the location decision. The Metropolitan Council report questioned whether local tax rate differences impacted location decisions and concluded the issue was ambiguous, i.e., taxes are a disincentive while good public services are an incentive. Of course the ambiguity may lessen if the firm's perception is that an increase in taxes does not result in a corresponding equal increase in public services. Bartik¹¹ summarizes 14 econometric studies completed between 1980 and 1990 which attempt to determine the effect, if any, local taxes have on the location of C&I within metropolitan areas. Measures of business activity included such things as employment in a community, the number of new manufacturing firms in an MSA by zip code areas, and the building permit value of all new and additional firms. Tax

measures used include effective property tax, wage tax rate, average tax rate, and the mill rate. Eight of the studies found a significant effect, three found a marginal effect, and three found no effect of taxes on the location of business.

Bartik also calculated long-run elasticities for seven of the studies, finding a significant effect of taxes on location. In simple terms elasticity is a measure of the proportional impact on quantity of price changes. In this case, it reflects the relationship between the quantity of long-run business activity (however defined) in a community and the cost (price) of locating in that community. It assumes that local services do not change as taxes increase and that service levels and tax burdens in equivalent communities in the metropolitan region are held constant. The measured elasticities range from -4.43 to 0.62 and are centered on -1.9 implying that a 10 percent increase in tax burden would result in a 19 percent reduction in employment for the community in the long-run. One of these studies was conducted using the Twin Cities metropolitan area. McGuire¹² used data on 119 MCDs in the seven county region and found a significant effect of the tax rate on location activity. The tax measure used was an adjusted mill rate and the business activity measure was building permit value. The long-run elasticity from this study was -1.59. Overall, these studies suggest that taxes are a factor in a firm's intra-metropolitan location decision.

Bartik's conclusion is that a wide variety of state and local economic development policies can significantly affect the long-run growth patterns of cities.

The advent of the industrial park, zoning, environmental regulation, and other public planning policies have also impacted the location decision process by reducing the number and location of possible sites. Chapman¹³ points out that various instruments of environmental policy, though not specifically designed as land use controls, nevertheless serve this function. There is evidence that they do affect the location of manufacturing industry. The full impact of environmental laws has not been studied extensively, but it is already certain they greatly affect

location decision making by increasing risk in property transfer, especially in older industrial corridors. Environmental liability is not a new risk for lenders, owners, or investors. It is the scope of liability that has changed. With the passage of the Comprehensive Environmental Response, Compensation, and Liabilities Act of 1980 (CERCLA or the Superfund Act), risk to lenders and investors increased substantially.

Under the Superfund Act, and other various state and local laws and statutes passed subsequently, liability for environmental contamination is strict, joint, several, and retroactive¹⁴. It means that any party associated with a real property transaction at the time of discovery of environmental contamination can be held liable for **all clean up costs**, even if the party is innocent of any actual responsibility for the contamination. To reduce their risk, all segments of the real estate industry came together, in early 1990, in an attempt to define due diligence. With the aid of the American Society for Testing and Materials (ASTM), the real estate community set out to define practical, concrete steps a buyer, seller, lender, tenant, and landlord should undertake to assess the environmental status of a property. The final result of this standard would be a limiting of liability where environmental due diligence had taken place. The final standards set by this body was due early in 1993¹⁵.

The state of Minnesota passed legislation in 1988 aimed at the same goal. The Minnesota Pollution Control Agency (MPCA) oversees the Property Transfer/Voluntary Cleanup Program which provides information and technical assistance to business and industry concerning environmental liability associated with real property transaction. In 1992, the Legislature passed the Land Recycling Act to further voluntary action for the investigation and clean up of contaminated properties by offering incentives to owners, buyers, and lenders. The MPCA may also provide no-action letters which limit the liability faced by parties involved in a property transfer to the contamination which they subsequently contribute and for which they are directly responsible.

There are several additional state and federal agencies involved in the administration, permitting, and oversight of environmental regulations, such as the EPA, the U.S. Army Corps of Engineers, the Minnesota Department of Agriculture, and the Minnesota Department of Natural Resources. The environmental permit process can be a tremendous burden to developers, lenders, buyers, etal. in land transactions and development. From the perspective of the developer the governing agencies are quick to say no and slow to say yes, i.e. grant a permit (see appendix Federal Wetland Jurisdiction: Sequence of Analysis for an example). Blakeley and Ames found that "permit requirements are so onerous that development of many urban locations is often proscribed due to toxic waste, building, parking, or local environmental regulations."¹⁶

Of the principal participants in the property transfer process, lenders seem to be the most conscious of the additional risks involved with environmental law. Lenders tend to be the party most likely to stop the transaction based on environmental assessment of the property¹⁷. There have been very few cases where a lending institution has been held responsible, but the magnitude of the settlements would make anyone conservative in future action.¹⁸

Another aspect of environmental regulation is that third parties can more easily block or delay development on a single issue. As a result, developers prefer the suburbs where there tend to be fewer regulations and interest groups to block their plans.

Quality of life is often mentioned as a factor in site selection. The literature suggests location decisions of technology-based firms are more dependent on non-traditional factors such as quality of life.¹⁹ Garreau gives many examples of high tech firms moving out of the city to bucolic sites. It is seen as way to attract and keep good employees, but is also important to corporate identity. But what exactly is quality of life? There are as many descriptions of quality of life as there are studies about quality of life. For Garreau quality of life is "nice" and defines it as "We know it when we see it". This is as good a definition as any. It is the individual's or firm's perception of the community's services, lot size,

schools, cultural activities, parks, crime, availability of "free" parking, or any other amenity. It is what makes people feel safe and secure. The perception, whether it is factual or not, is that the central cities are not as safe and secure a place to live as the developing ring and therefore the quality of life is lower.

Garreau defines some "laws" underlying development. Though some of these laws may seem more satirical comment than factual, they do seem to reflect development reasoning and practice. From these laws, the prime consideration in a company's relocation decision is that the commute of the chief executive officer must always become shorter. This may carry more weight than one would first suppose. William H. Whyte, in his book *City*, shows a map of thirty-eight firms which moved from New York City to the area around Stamford and Greenwich, Connecticut. Average distance from the new firm location to where the chief executive lived at the time of the move was eight miles. The primary reason given for the site selection was "to better meet the quality of life needs of their employees". It seems quality of life issues may sometimes be used as the "public" explanation for a firm's behavior, when in fact, the location decision was based on some other factor.

REGIONAL PATTERNS

MCD ATTRIBUTE MAPPING: PURPOSE AND METHODOLOGY

The purpose of attribute mapping by municipality (MCD) is to see if any geographical patterns emerge in the seven-county metropolitan region. The region is divided into four planning areas of interest. They are the Core - Minneapolis and Saint Paul, the Fully Developed Area - inner ring suburbs, the Developing Area - second ring suburbs, and the Rural Area - this includes Free-standing growth centers (Map 1 Planning Areas). The purpose is to determine which, if any, of the planning areas have an advantage or are at a disadvantage with respect to the development of commercial and industrial land in the region.

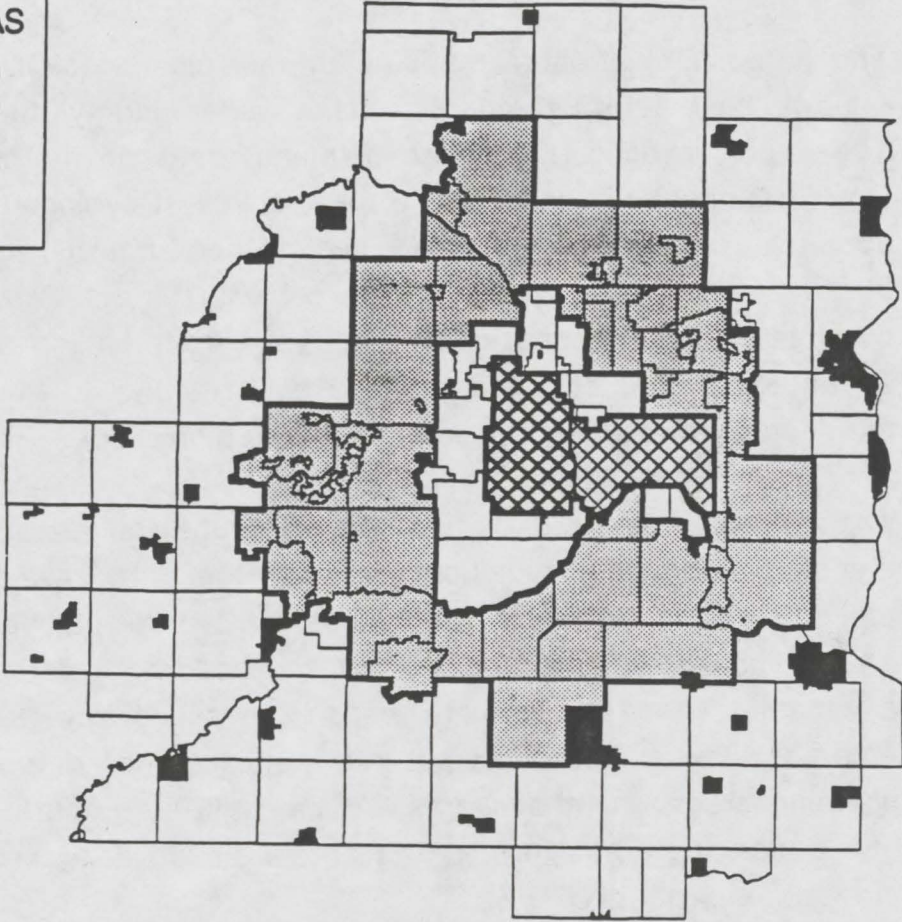
The methodology itself is quite simple. Once the factors have been identified and variable values recorded, the data base is queried to find the outliers, i.e. high and low values for a particular variable of the MCDs. The outliers are defined as the top and bottom 10 percent of the MCDs for a variable. These outliers are mapped to see if any geographic patterns emerge. Of particular interest are patterns that differentiate the four planning areas. In other words, do the patterns generated suggest that any of the planning areas have an advantage or are at a disadvantage based on the variable queried?

The research is designed to make use of MAPINFO® software, a geographic information system for desktop computers. Data were collected from several sources including the 1990 Census, Minnesota Pollution Control Agency, Metropolitan Council, Minnesota Department of Revenue Local Government Services Division, and the League of Minnesota Cities. The original list of factors by which the MCDs were to be compared consisted of commercial and industrial land use, number and value of building permits, number of environmental clean-up sites, tax increment financing, fiscal disparity, average tax rate, and employment data.

PLANNING AREAS

MAP 1: PLANNING AREAS

- ☒ CORE (Minneapolis) (1)
- ☒ CORE (Saint Paul) (1)
- DEVELOPED (25)
- ▨ DEVELOPING (68)
- RURAL (63)
- RURAL (Centers) (39)



DATA SOURCE: Metropolitan Council

The factors were selected to reflect the intra-metropolitan location attractiveness of sites to commercial and industrial firms, as implied by the literature review and interviews held during the early portion of the research. Environmental liabilities and regulations emerged as a primary factor in the location decision process for all parties (seller, buyer, lender, contractor, etc.) involved in the transfer of real property. Environmental variables are listed for 1992 only, because much of the legislation passed to regulate this area was not in effect until the late seventies and early eighties. Until then, all locations were at approximately the same place in terms of environmental liability (i.e. attractiveness for C&I development) and differentiation did not begin until the early eighties.

The primary problem encountered during the research came from changes in the way the original data are collected and reported by each agency. For example, the method the Department of Revenue uses to compute the tax increment net tax has changed twice since 1980. Initially they used assessed values of properties within the tax increment district and now they use the tax capacity of the district as the basis of the computation. There is no formulaic way to reconcile the two methodologies. Therefore it is difficult to map changes over time for many variables.

The difficulties the data presented were overcome by the decision to present "snapshots in time" of the MCDs in the region. Data were collected for years from 1980 to 1993. Some variables have data for one year and others have data for up to four years. Whenever possible, the years 1980 and 1990 were included for each variable. If it was not possible to get data for those two years, the nearest available years were used.

Mapping is by individual MCD and not planning area because it allows the patterns to flow across planning area boundaries. This way one can more readily see whether or not the planning areas capture the pattern or the planning areas are independent of the pattern. Differences between planning areas are more easily described and shown in tabular form or with graphs.

The data are heavily skewed for most factors. This is not unexpected because most of the variables have a direct relationship to the amount of industrial and commercial land use in an MCD. So one should see higher values in the few MCDs with large amounts of C&I land use and small values in the majority of MCDs. In most cases, the variable's average value plus or minus one standard deviation could be used for the cut-off point for mapping. The resulting group of outliers is approximately equal to the top and bottom 10 percent of cases. It is important to look not only at the actual value amount of gain or loss for an MCD, but also the percent of change in the amount of a given variable. This way, small value MCDs are not excluded from the analysis simply because they did not have large actual increases or decreases. By using these two measures of change, identification of any patterns which exist and differentiate the planning areas should be possible.

RESULTS OF ATTRIBUTE MAPPING

Commercial and Industrial Land Use

Not surprisingly, the Core and Developed Areas had little or modest changes in the total amount of C&I land use from 1980 to 1990 - 0.79% and 8.53% respectively. The Developing and Rural Areas experienced gains in C&I land use of 40% and 49% respectively (Table 1).

Building Permit Data

The building permit data for the year 1990 show the Core Area holding nearly a 34% share of the estimated market value of new construction (permit types 318-329) and a 45% share of additions (permit type 417) in the region (Table 2). In 1992, the Core Area's share of new construction had dropped off to 3.75%, but its share of additions remained nearly constant at 43%. The remaining planning areas maintain relatively stable shares of the estimated market value of the building permits. Most of the estimated market value of new construction permits is going to the

COMMERCIAL and INDUSTRIAL LAND USE

Table 1

CHANGE IN ACRES OF C&I LAND USE FY 1980 TO 1990

Planning Area	Count	1990 C & I Total Acres	1980 C & I Total Acres	% Change from 1980 C & I
Core Total	2	13,726	13,618	0.79
Core Minneapolis	1	7,383	7,390	-0.09
Core Saint Paul	1	6,343	6,228	1.85
Developed	25	16,503	15,206	8.53
Developing	68	32,503	23,214	40.01
Rural Total	102	11,188	7,511	48.95
Rural	63	8,528	5,319	60.33
Rural Centers	39	2,660	2,192	21.35
Grand total	197	73,920	59,549	24.13

CHANGE IN ACRES OF COMMERCIAL LAND USE FY 1980 TO 1990

Planning Area	Count	1990 Commercial Acres	1980 Commercial Acres	% Change from 1980 Commercial
Core Total	2	3,678	3,527	4.28
Core Minneapolis	1	1,775	1,640	8.23
Core Saint Paul	1	1,903	1,887	0.85
Developed	25	6,434	5,654	13.80
Developing	68	11,767	6,808	72.84
Rural Total	102	4,027	2,306	74.63
Rural	63	2,700	1,177	129.40
Rural Centers	39	1,327	1,129	17.54
Grand total	197	25,906	18,295	41.60

CHANGE IN ACRES OF INDUSTRIAL LAND USE FY 1980 TO 1990

Planning Area	Count	1990 Industrial Acres	1980 Industrial Acres	% Change from 1980 Industrial
Core Total	2	10,048	10,091	-0.43
Core Minneapolis	1	4,568	4,588	-0.44
Core Saint Paul	1	5,480	5,503	-0.42
Developed	25	10,069	9,552	5.41
Developing	68	20,736	16,406	26.39
Rural Total	102	7,161	5,205	37.58
Rural	63	5,828	4,142	40.70
Rural Centers	39	1,333	1,063	25.40
Grand total	197	48,014	41,254	16.39

BUILDING PERMIT DATA

TABLE 2

ESTIMATED MARKET VALUES FY 1990 & 1992

Planning Area	Count	Estimated Market Value of New Const. Permits		% of Total Estimated Market Value New Const.	
		1990	1992	1990	1992
Core Total	2	373,034,776	7,793,601	33.92%	3.75%
Core Minneapolis	1	360,841,810	4,030,000	32.82%	1.94%
Core Saint Paul	1	12,192,966	3,763,601	1.11%	1.81%
Developed	24	126,157,747	47,547,298	11.47%	22.89%
Developing	67	576,093,288	121,005,708	52.39%	58.25%
Rural Total	102	24,311,095	31,381,455	2.21%	15.11%
Rural	63	12,061,908	19,448,220	1.10%	9.36%
Rural Centers	39	12,249,187	11,933,235	1.11%	5.74%
Grand total	195	1,099,596,906	207,728,062	100.00%	100.00%

Planning Area	Count	Estimated Market Value of Additions Permits		% of Total Estimated Market Value Additions	
		1990	1992	1990	1992
Core Total	2	230,143,876	197,088,200	44.64%	42.53%
Core Minneapolis	1	102,222,260	119,072,470	19.83%	25.70%
Core Saint Paul	1	127,921,616	78,015,730	24.81%	16.84%
Developed	24	150,162,700	112,239,573	29.12%	24.22%
Developing	67	122,320,384	142,949,128	23.72%	30.85%
Rural Total	102	12,979,374	11,080,814	2.52%	2.39%
Rural	63	4,079,224	1,882,168	0.79%	0.41%
Rural Centers	39	8,900,150	9,198,646	1.73%	1.99%
Grand total	195	515,606,334	463,357,715	100.00%	100.00%

DATA SOURCE: Metropolitan Council, Building Permit Data (permit types 318-329 & 417)

Developing Area - 52% in 1990 and 58% in 1992, as well as approximately 25% of additions. It is worth noting that Minneapolis and Saint Paul differ substantially in the amount and estimated value of new construction in 1990. Minneapolis had nearly \$361 million, while Saint Paul had only \$12 million of new construction value. This is missed when viewing them together as a single planning area. Of the \$1.1 billion total of the estimated value new construction in 1990, Minneapolis' share was \$360 million or 33%.

Environmental Liability

The environmental liability of an MCD is here defined as the number of environmental clean-up sites within the MCD. The average number of clean-up sites per MCD in the Core Area is 92, in the Developed Area it is 6, in the Developing Area it is 5, and in the Rural Area it is 2 (Table 3, Map 2, and Map 3). If the measure of environmental liability is redefined as sites per square mile the result for the planning areas from the Core Area outward are 1.8, 0.9, 0.4, and 0.1 sites per square mile respectively. When looking at only those sites already listed or suspected as federal and state Superfund sites, differences are even greater with the Core Area having 1.03 sites per square mile, the Developed Area with 0.36 sites per square mile, the Developing area with 0.13 sites per square mile, and the Rural area with 0.03 sites per square mile.

The Minnesota Pollution Control Agency recognized the need to develop some method to expedite environmental clean up of contaminated sites. The result is the Property Transfer Program. Of the 59 sites working with the Property Transfer Program, 32 are in the Core Area cities. This is a double-edged sword. It does allow sites to be developed or redeveloped that would otherwise remain unused, but it also means greater 3rd party involvement in the property transfer. Generally leading to longer and more expensive transactions.

ENVIRONMENTAL LIABILITY**Table 3****NUMBER OF SITES LISTED: NOVEMBER 1992**

Planning Area	Count	Total Number of Sites	% of Total Sites	Number of Sites per MCD	Total Sq MI	Sites per Sq MI
Core Total	2	184	21.96	92.00	103.41	1.779
Core Minneapolis	1	101	12.05	101.00	52.58	1.921
Core Saint Paul	1	83	9.90	83.00	50.83	1.633
Developed	25	152	18.14	6.08	162.58	0.935
Developing	68	323	38.54	4.75	765.94	0.422
Rural Total	102	179	21.36	1.75	1730.21	0.103
Rural	63	86	10.26	1.37	1660.11	0.052
Rural Centers	39	93	11.10	2.38	70.10	1.327
Grand total	197	838	100.00	4.25	2762.14	0.303

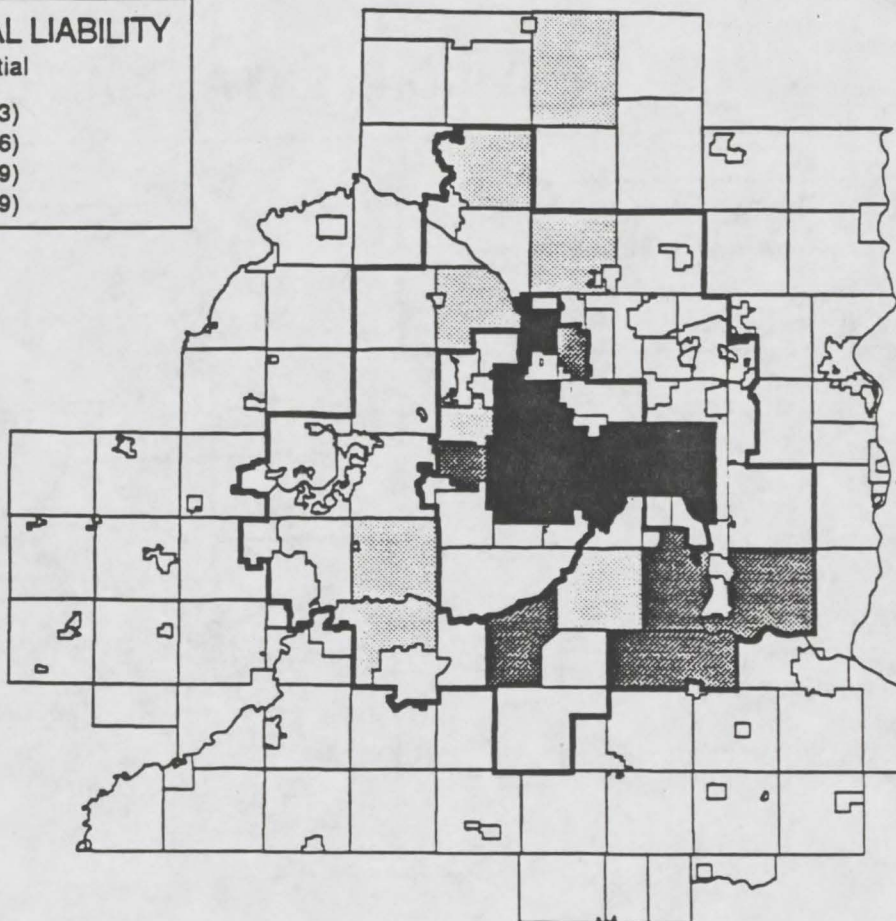
DATA SOURCE: MN PCA, Master Facilities List November 1992

ENVIRONMENTAL LIABILITY

MAP 2: ENVIRONMENTAL LIABILITY

Highest Risk Potential

■	21 to 75	(3)
■	10 to 20	(6)
□	6 to 10	(9)
□	0 to 5	(179)



DATA SOURCE: Minnesota Pollution Control Agency

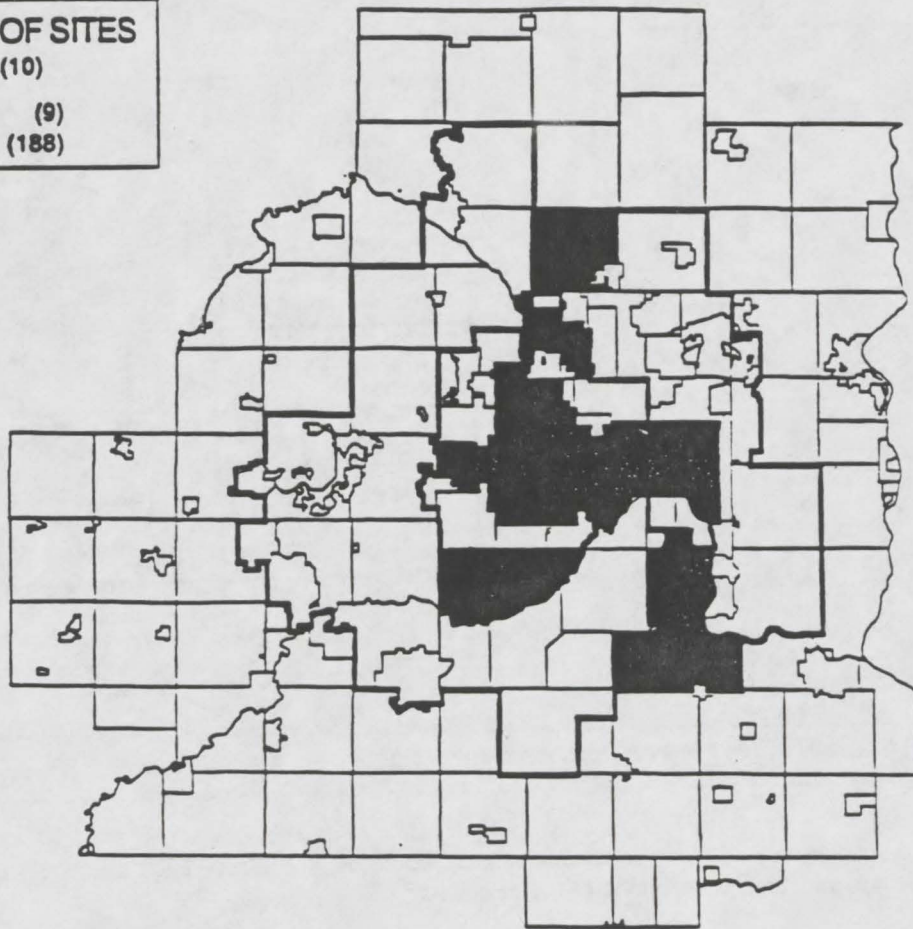
Risk Potential is defined as the total number of CERCLIS, NLP, PLP, SW_PER, and HW_PER sites in an MCD. See the appendix for descriptions of the variables.

ENVIRONMENTAL LIABILITY

MAP 3: TOTAL NUMBER OF SITES

Average (4) + StdDev (10)

- (SITE_TOTAL > 14) (9)
- all others (188)



DATA SOURCE: Minnesota Pollution Control Agency

Percent of Tax Capacity Captured by TIF

The average captured increment as a percent of tax capacity value for the region is 7.87% (Table 4). The Core Area percent is slightly higher than average at 11.74%, while the lowest average for a planning area is the Developing Area at 5.62%. It is more interesting to look at the clustered distribution of MCDs with high capture rates (Map 4). This suggests the use of financial incentive packages available the MCDs is not defined by planning area, but rather by those MCDs with entrepreneurial city management - that is, the willingness and sophistication to use such tools to attract business.

Fiscal Disparities

Rural Area of the metropolitan region contribute 3.59% of the total contribution to fiscal disparities, while receiving 11.23% of the distribution (Table 5). This results in a difference (distribution less contribution) as a percentage of contribution of 212%. In other words, the distribution is more than three times the contribution. The Developed Area contributes 28.71% of the total contribution, while receiving 20.4% of the distribution resulting in a difference as a percentage of contribution of -28.92%. The remaining two planning areas essentially break even. However, once again it should be noted that the Core Area cities' difference as a percentage of contribution differ greatly with Minneapolis at -28.57% and Saint Paul at +110.95%.

Average Tax Rates

The average tax rates for cities in the region is 118.6% of capacity. The Rural area shows a greater range of rates than the other planning areas, but its significance of this variability is arguable (Table 6). One interesting note is the Core and Developing areas have the least degree of variability. Those with higher than average tax rates tend to be found in Carver, Ramsey, and Scott counties (Map 7). Most of the MCDs with low average tax rates are in Anoka, Dakota, or Washington counties (Map 8).

This suggests location differences in average tax rates are county-related rather than planning area-related.

TAX INCREMENT

TABLE 4

FY 1990

Planning Area	Count	TAX CAPACITY VALUE		% of TOTAL CAPTURED
		TOTAL	CAPTURED INCREMENT	
Core Total	2	584,100,263	68,547,574	11.74%
Core Minneapolis	1	395,677,742	49,810,087	12.59%
Core Saint Paul	1	188,422,521	18,737,487	9.94%
Developed	25	551,803,161	38,234,656	6.93%
Developing	68	768,348,060	43,198,853	5.62%
Rural Total	102	57,414,288	4,497,127	7.83%
Rural	63	24,223,337	1,578,440	6.52%
Rural Centers	39	33,190,951	2,918,687	8.79%
Grand total	197	1,961,665,772	154,478,210	7.87%

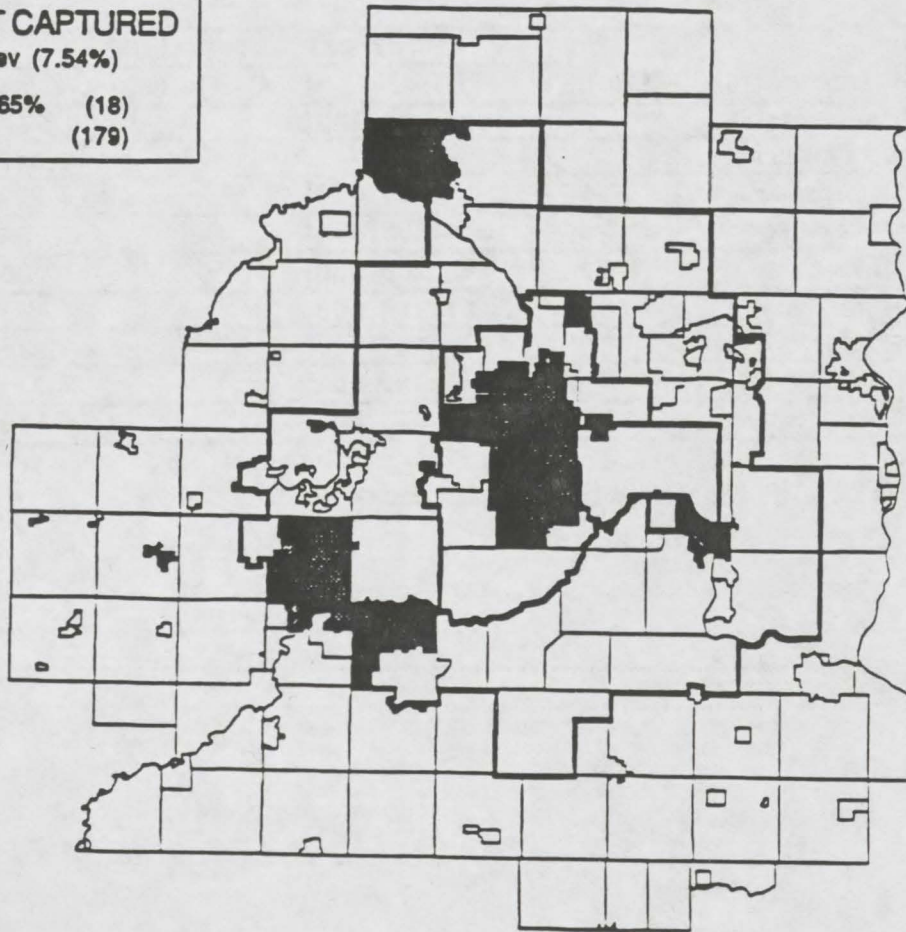
DATA SOURCE: MN Dept. of Revenue, Local Government Division

TAX INCREMENT

MAP 4: TAX INCREMENT CAPTURED

Average (4.11%) + StdDev (7.54%)

- % CAPTURED > 11.65% (18)
- all others (179)



DATA SOURCE: Department of Revenue, Local Government Services

FISCAL DISPARITIES

TABLE 5

TAX CAPACITY: FY 1990

Planning Area	Count	Contribution	Distribution	Difference
Core Total	2	73,692,596	78,159,473	4,466,876
Core Minneapolis	1	55,398,808	39,569,297	-15,829,511
Core Saint Paul	1	18,293,788	38,590,176	20,296,387
Developed	25	76,063,558	54,064,744	-21,997,814
Developing	68	105,705,367	102,998,408	-2,706,978
Rural Total	102	9,521,553	29,753,093	20,192,113
Rural	63	4,400,327	18,764,201	14,318,146
Rural Centers	39	5,121,226	10,988,892	5,873,967
Grand total	197	264,983,074	264,975,718	-45,803

Planning Area	Count	Difference as a % of Contribution	Contribution as a % of Total Contribution	Distribution as a % of Total Distribution
Core Total	2	6.06	27.81	29.50
Core Minneapolis	1	-28.57	20.91	14.93
Core Saint Paul	1	110.95	6.90	14.56
Developed	25	-28.92	28.71	20.40
Developing	68	-2.56	39.89	38.87
Rural Total	102	212.48	3.59	11.23
Rural	63	326.43	1.66	7.08
Rural Centers	39	114.58	1.93	4.15
Grand total	197	0.00	100.00	100.00

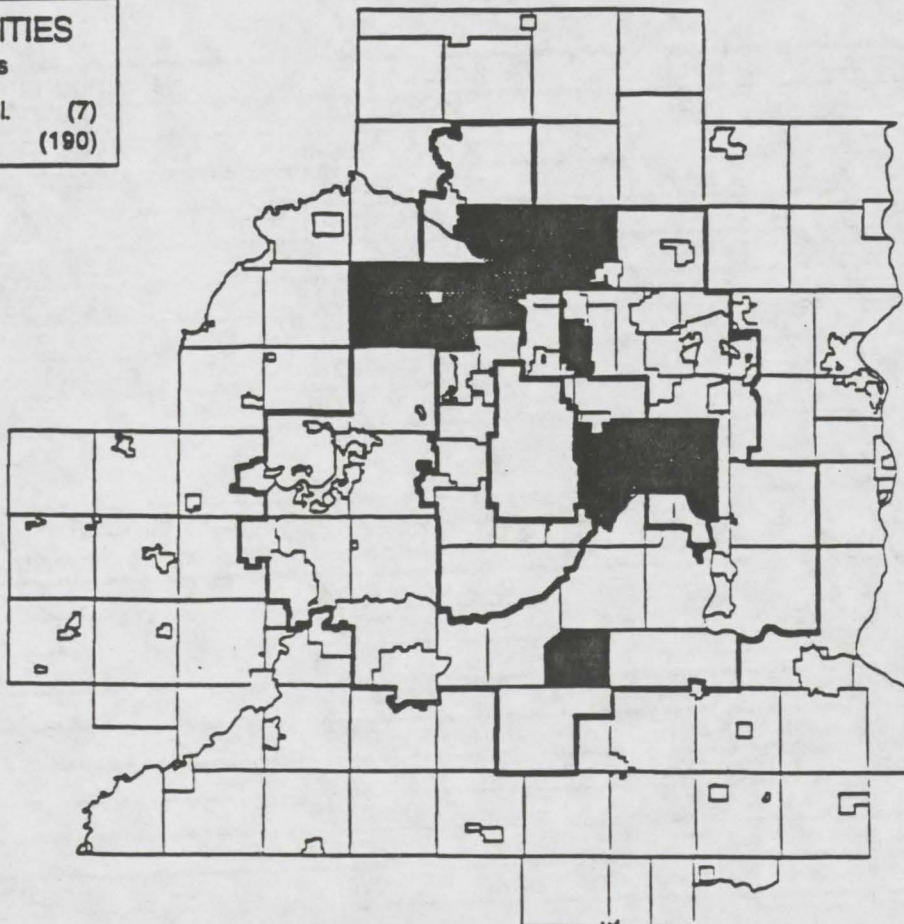
DATA SOURCE: Dept. of Revenue, Local Government Services

FISCAL DISPARITIES

MAP 5: FISCAL DISPARITIES

Biggest Gainers in dollars

- > Ave Contrib & Gain > 1 Mil. (7)
- all others (190)



DATA SOURCE: Department of Revenue, Local Government Services

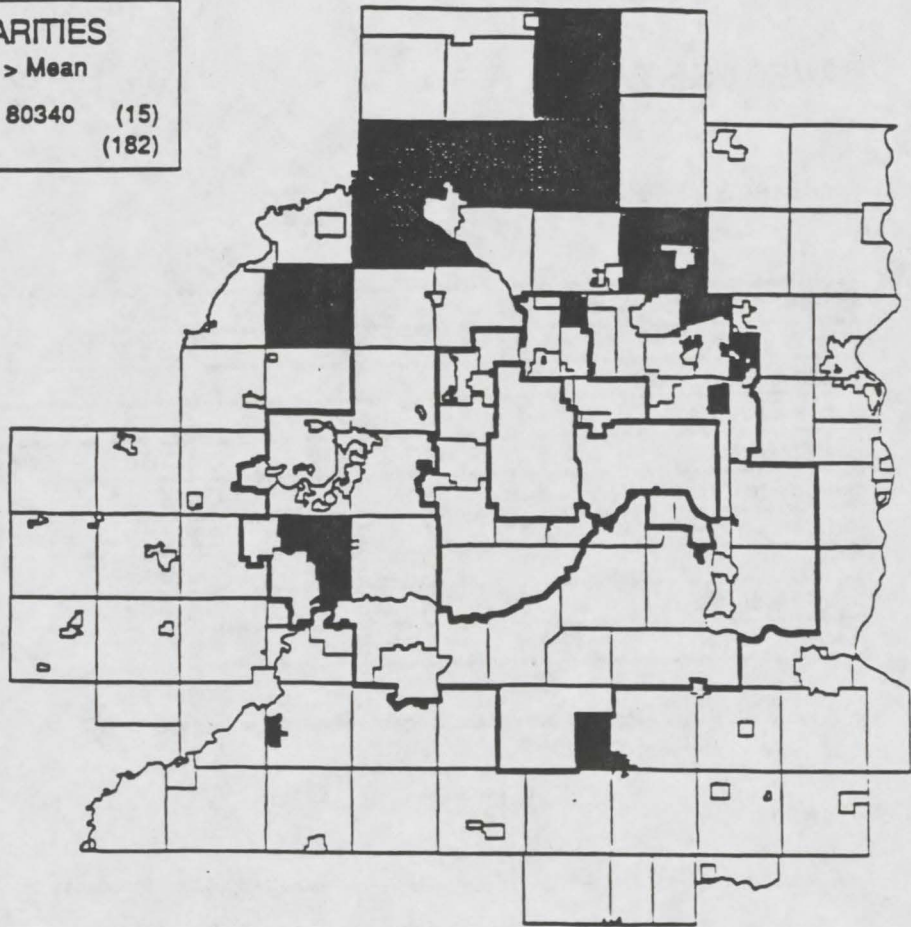
DOC ID	90Contrib	90Distrib	90 Diff
BLAINE	3366846	6112554	81.6
COON RAPIDS	3016123	6601120	118.9
APPLE VALLEY	1583553	4005943	153
BROOKLYN PARK	4403030	7412262	68.3
MAPLE GROVE	2114323	4611434	118.1
NEW BRIGHTON	1859905	2979991	60.2
ST. PAUL	18293788	38590176	110.9

FISCAL DISPARITIES

MAP 6: FISCAL DISPARITIES

Gain > 300% and Contrib > Mean

- Gain > 300% and Contrib > 80340 (15)
- all others (182)



DATA SOURCE: Department of Revenue, Local Government Services

DOC ID	90Contrib	90Distrib	90D less C	90 Diff
ANDOVER	450430	2017347	1566917	347.9
EAST BETHEL	118435	1399375	1280940	1081.6
HAM LAKE	367391	1521360	1153969	314.1
LINO LAKES	146276	1186628	1040353	711.2
RAMSEY	483739	2065274	1581535	326.9
CHANHASSEN	162417	847378	684960	421.7
FARMINGTON	91093	846148	755056	828.9
CHAMPLIN	222511	2328785	2106274	946.6
CORCORAN	140032	622163	482131	344.3
DAYTON	127413	622437	495024	388.5
MOUNDS VIEW	517348	2183395	1666047	322
NORTH ST. PAUL	419435	1879414	1459979	348.1
WHITE BEAR TS	150162	982712	832551	554.4
JORDAN	83869	597633	513764	612.6
MAHTOMEDI	81959	551443	469484	572.8

AVERAGE TAX RATES

TABLE 6

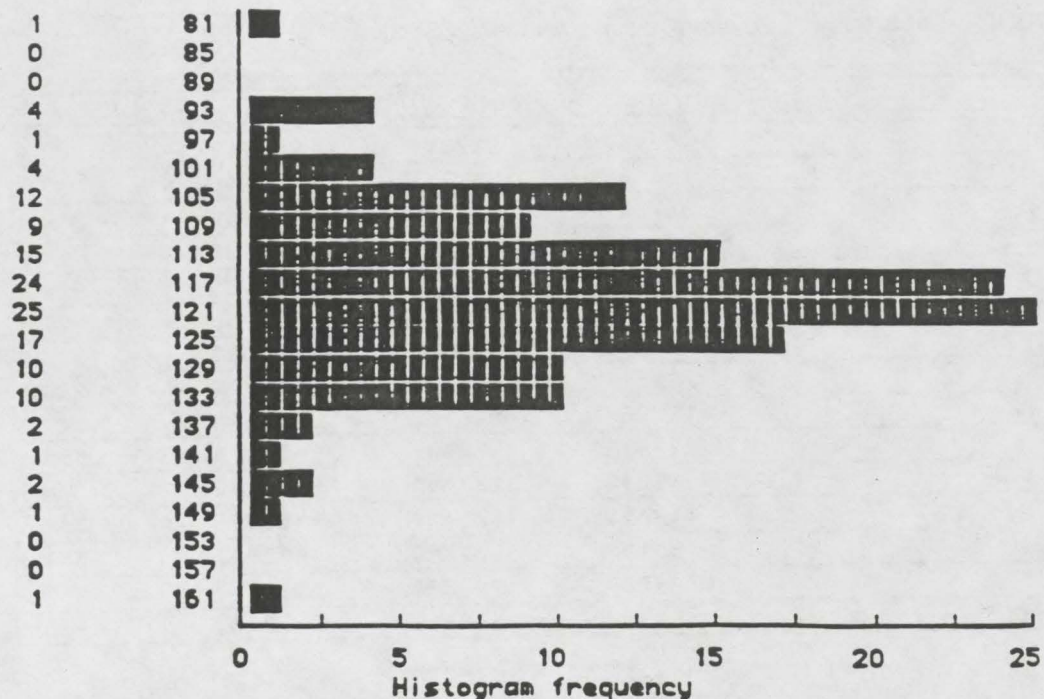
AVERAGE TAX RATES FOR CITIES ONLY FY 1992

Planning Area	COUNT	AVERAGE	MIN	MAX	STD DEV
Core Total	2	128.246	122.218	134.274	8.525
Core Minneapolis	1	122.218			
Core Saint Paul	1	134.274			
Developed	23	120.931	104.336	159.497	11.176
Developing	63	119.229	100.501	136.522	8.347
Rural Total	51	116.279	82.603	147.534	14.506
Rural	14	112.591	100.017	126.050	7.288
Rural Centers	37	117.675	82.603	147.534	16.303
Grand total	139	118.558	82.603	159.497	11.507

DATA SOURCE: Dept. of Revenue, Local Government Services

AUETAX92

Count Midpoint One symbol equals approximately .50 occurrences



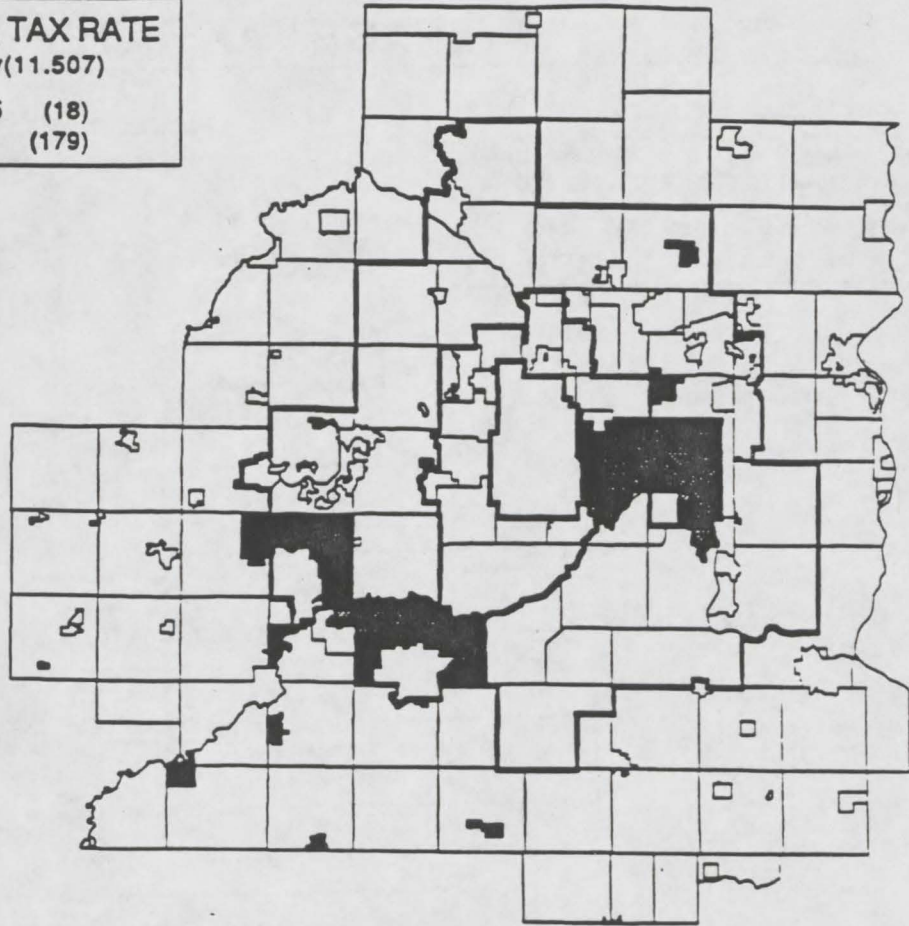
Valid cases 139 Missing cases 58

AVERAGE TAX RATE

MAP 7: HIGH AVERAGE TAX RATE

Average(118.558)+StDev(11.507)

- AveTax92 > 130.065 (18)
- all others (179)



DATA SOURCE: Department of Revenue, Local Government Services

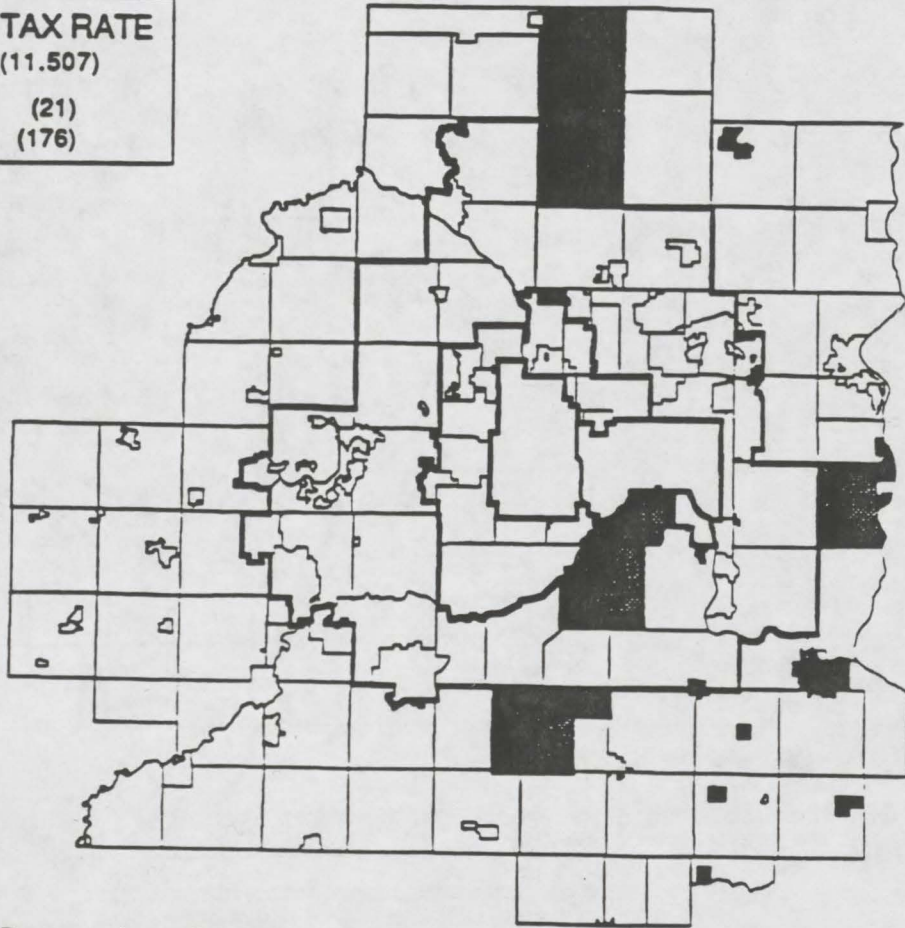
DOC ID	AveTax92
CENTERVILLE	136.522
HILLTOP	159.497
CARVER	146.98
CHANHASSEN	133.908
HAMBURG	135.62
VICTORIA	133.026
SOUTH ST. PAUL	132.564
LONG LAKE	131.483
LAUDERDALE	131.173
LITTLE CANADA	133.443
ST. PAUL	134.274
BELLE PLAINE	130.593
ELKO	147.534
JORDAN	144.801
NEW MARKET	141
NEW PRAGUE	134.588
SAVAGE	132.116
SHAKOPEE	134.424

AVERAGE TAX RATE

MAP 8: LOW AVERAGE TAX RATE

Average(118.558)-StDev(11.507)

- 82.603 to 107.051 (21)
- all others (176)



DATA SOURCE: Department of Revenue, Local Government Services

MCD Descriptive Stats

Table 7

Planning Area Descriptive Stat		NO_NEWPER90	VAL_NEWPER90	NO_ADDPER90	VAL_ADDPER90
All Areas	Count	197	197	197	197
	Sum	2,491	1,099,596,906	6,631	515,606,334
	Average	13	5,581,710	34	2,617,291
Percentile Rank of Average		80%	91%	82%	85%
	Mean	2	73,691	1	10,000
Standard Deviation		41	35,452,717	127	12,379,475
	Minimum	0	0	0	0
	Maximum	516	360,841,810	1,282	127,921,616
	Max / Sum	21%	33%	19%	25%

Descriptive Stat	COMMERCIAL80	INDUSTRIAL80	COMMERCIAL90	INDUSTRIAL90
Count	197	197	197	197
Sum	18,295	41,254	25,906	48,014
Average	93	209	132	244
Percentile Rank of Average	80%	81%	79%	79%
Mean	23	33	32	45
Standard Deviation	224	594	274	612
Minimum	0	0	0	0
Maximum	1,887	5,503	1,903	5,480
Max / Sum	10%	13%	7%	11%

Descriptive Stat	FD CONTRIBUT90	FD DISTRIB90	TI % CAPT90	TI NET TAX90
Count	197	197	197	197
Sum	264,983,074	264,975,718	NA	157,069,472
Average	1,345,092	1,345,054	4.11%	797,307
Percentile Rank of Average	84%	76%	53%	81%
Mean	80,340	296,848	0.00%	0
Standard Deviation	4,863,161	4,075,144	7.54%	3,955,207
Minimum	0	0	0.00%	0
Maximum	55,398,808	39,569,297	75.55%	50,645,797
Max / Sum	21%	15%	NA	32%

Descriptive Stat	POP80	POP90	EMPLOY80	EMPLOY90
Count	197	197	197	197
Sum	1,985,650	2,288,721	1,040,010	1,291,804
Average	10,079	11,618	5,279	6,557
Percentile Rank of Average	79%	77%	84%	83%
Mean	2,150	2,441	290	558
Standard Deviation	33,744	34,355	24,243	24,754
Minimum	0	0	0	0
Maximum	370,951	368,383	276,310	278,314
Max / Sum	19%	16%	27%	22%

Descriptive Stat	ENVRSUM	ENVRSITES	AVETAX RATE92
Count	197	197	139
Sum	1,072	838	NA
Average	5	4	118,558
Percentile Rank of Average	74%	73%	46%
Mean	2	1	118,893
Standard Deviation	14	10	11,507
Minimum	0	0	82,603
Maximum	139	101	159,497
Max / Sum	13%	12%	NA

DISCUSSION OF RESULTS

The findings suggest that it may not be appropriate to make policy decisions based on data gathered by planning areas. This is particularly true of the Core area, where the two cities, Minneapolis and Saint Paul, have not recently enjoyed the same growth. This is revealed when looking at the building permit, tax increment, fiscal disparities, and average tax rate data for the two cities. In 1990, Minneapolis had 300 times the amount of estimated value of new building value than Saint Paul (Table 2). Minneapolis has two times the total tax increment tax capacity value of Saint Paul, \$396 million to \$188 million, and captures a larger percentage of the capacity, 12.59% to 9.94% (Table 4). And while Minneapolis is a sizable net contributor to Fiscal Disparities, Saint Paul is one of the largest net recipients (Table 5, Map 5 and Map 6). However, one very important factor affecting the location of C&I which is common to both cities is their relative high level of environmental risk.

If one factor of those factors investigated had to be selected as having the greatest impact on controlling the location of commercial and industrial development in the FDA, it would be environmental liability. This is because environmental regulations have so many corollary effects. The monies generated with tax increment financing in the Core Area goes toward environmental clean-up costs rather than to land cost write-down, government agencies must assume a greater role in property transfer process, and all parties normally a part of the transfer of real property are facing greater uncertainty as a result of the regulations.

The Fully Developed Areas are certainly at a disadvantage based on this factor (Map 2 and Map 3). While the distribution of sites across the Fully Developed and Developing Areas, relative to the total number of sites, is about equal at 40%, the average number of sites per MCD within the planning areas differs significantly. The Core Area averages 92 sites per MCD, while the Developed Area averages six sites, and the Developing Area almost five sites per MCD. The environmental regulations, in effect, are a form of regional zoning. Map 2 may be viewed then as an environmental risk zoning map. It shows the core cities as the riskiest places to locate.

It shows also which MCDs may face similar environmental challenges in the future. These tend to follow the older industrial corridors developed along the Minnesota and Mississippi rivers.

FINDINGS FROM KEY INFORMANT INTERVIEWS AND INDUSTRY REPORTS

Overbuilding in the office and speculative industrial/warehouse space in the 1980s have flattened absorption rates of new space and reduced income streams for building owners in both the Fully Developed Area and the developing communities. The early 1990s are thus "buyers" rather than "sellers" markets for the service, retail and industrial sectors.

OFFICE MARKET

In the office market, absorption of new space has declined by 11.5% each year for the last five years. Downtown Minneapolis experienced a 20% vacancy rate in its Class A buildings and the southwest suburban sector 17% during 1992. Net rental rates declined by 15% in 1992 and effective rents for building owners ranged from a negative \$2/square foot to a positive \$1/sq. ft. after all tenant improvements, commissions and other leasing costs²⁰.

Cutbacks in defense-related and other businesses have increased the supply of sub-leased space - 500,000 sq. ft. at the end of 1992 - thus further depressing rents.

The declining assessed value of downtown Minneapolis office buildings motivated the City in 1993 to adopt a new policy to subsidize parking for **new employers in the central business district**. The adopted policy allows the city to lease space from parking owners, thus making the space tax exempt. Public Works will pay owners the market rate minus the tax savings and lease to the new employees at that rate, plus 4% for administrative costs. One space per 1,000 sq. ft. of leasable area is allocated, with a cap of 1500 spaces. This would cover 1.5 million square feet of new office absorption, equivalent to 37 percent of existing vacant space in late 1992. Over the next five years spaces in the peripheral parking ramps can be leased to new employees to capture only the operating costs (not debt service). Since the metropolitan area has an

estimated eight-year supply of space, this policy is designed to quicken absorption and thus improve the relative competitive position of the downtown location in a glutted market²¹.

INDUSTRIAL MARKET

Manufacturing employment has grown very slowly in the metropolitan area over the past year but vacancy rates have dropped to 4 percent (still 10 million square feet however), the lowest in fifteen years²². The most seriously over-built segment of the market is the multi-tenant building - vacant space estimated at 7.2 million square feet²³. Absorption of new space is quite low given increasing up-front cash requirements from developers.

The second and third tier suburban communities are getting most of the new industrial buildings - including the southwest suburban areas of Chanhassen, Chaska and Shakopee and the northwest Champlin area. However, over-building makes the office-showroom market softest in the southwest and south-central suburbs with a 10 percent vacancy rate.

The problem for the inner cities is lack of vacant land that is not contaminated. A survey completed for the St. Paul Port Authority in 1991 identified only 17 available sites, all but two less than 6.5 acres in size. Thirteen of these sites are contaminated and remediation is calculated at around \$18 million - i.e., a cost of just under \$1,500 per job created for remediation alone. Total development costs per job were calculated at \$15,341²⁴. Available redevelopment resources under TIF are insufficient to handle this extra cost and thus the city is unable to remain competitive with the developing communities.

Geographic dispersion of jobs beyond the Fully Developed Area is expected to continue for many reasons: continuing dispersion of population and labor force; lack of large sites for growing industry in the FDA; lender avoidance of environmental liability associated with redeveloped sites; lack of state and federal resources to help the fully developed communities redevelop/recycle older industrial districts; excellent

highway accessibility for the developing communities; the extensive regional interceptor system of the Metropolitan Waste Control Commission serving the developing suburbs; low cost land in the developing area that has full utility services, marketed with public subsidies which reduce the developer's front-end expenditures; expansion of sub-regional transit services by the "opt-out" communities from the Metropolitan Transit Commission (for example, the community-operated Southwest Metro Transit, serving the Eden Prairie, Chanhassen and Chaska communities, provides reverse commute services from downtown Minneapolis and is currently generating more transit revenue than the communities are paying MTC through the property tax); increased efforts to link job opportunities on the fringe with the labor force of inner city neighborhoods; desire of the high-tech industries for greater environmental quality to fit their workforce preferences.

RETAIL MARKET

In contrast, the current retail market appears more resilient. Despite the new Mall of America two-thirds of all retail centers reported a vacancy rate of less than 10 percent at the end of 1992²⁵. Highest vacancies are in the 191 neighborhood centers, particularly in the older ones with poorer locations and not anchored by a supermarket. Given the increasing scale of supermarket buildings, not many neighborhood centers are in locations to attract this volume of business.

Suburbs in the developing area are still attracting significant growth in community-scale shopping centers - particularly those anchored by large discount stores or the "power centers" where all tenants are "value oriented" outlet-type operations. Renovations in the Fully Developed Area or shifting tenant mix away from specialty stores have kept the older centers competitive. Retail space is much more closely tied to trade area purchasing power as compared with the industrial or office markets, and centers left without high density residential and/or affluent households in the trade area will lose profitability.

DEVELOPERS' PERSPECTIVES

Discussions with developers lead us to conclude that local real estate taxes are not significant in a decision to locate within the metropolitan area. The exception may be for downtown Minneapolis where the high local taxes plus higher costs of land do make a difference in the final locational decision. Land prices on the suburban fringe (including the fast growing southwestern suburbs) may be only half those of the fully developed communities - all other site factors being equal. Taxation policies at the state level were cited as more critical in a decision to move into the Twin Cities - not where within the region the company will select to go.

The clear disadvantage of the central cities for industrial development is environmental contamination. Jim Moore at the Minneapolis Community Development Agency estimates that the city has spent \$20 million over the past five years in cleaning up sites, money that otherwise could have gone to the Neighborhood Redevelopment Program. Saint Paul is similarly constrained by the environmental liability issues associated with industrial land development.

Communities on the developing fringe have been able in the past to use the tax increment financing provisions to further enhance their competitive advantage in the commercial and industrial marketplace. While amendments to the TIF laws have restricted use of TIF on "greenfield sites", the FDA communities are still disadvantaged by relatively higher land costs, fewer large sites, fewer amenities surrounding the sites for image-conscious corporations, and the ability of developing area communities to offer attractive public subsidies.

Almost all cities are using TIF or some other financial subsidy to attract new jobs and generally the urban fringe communities are offering the most attractive financial packages. How a community reduces the up-front infrastructure improvement costs for developers is significant, but the more mature communities are more likely to require the developer to assume more of these costs rather than using the community's bonding capacity. Requirements such as floor area ratios, amenity improvements,

density controls, etc. are generally seen as consistent across cities and do not push developers away from desirable sites. Most corporations are seeking landscape quality specifications in local ordinances.

Local ordinances defining permitted uses in a zoning district are viewed as more important than landscaping, parking or density standards. For example, permitting or denying outdoor storage areas in an industrial park, or excluding certain commercial uses in an office park have impacts on where certain types of business can locate or constrain later phases of development. It was noted that the Carlson companies in Plymouth are currently seeking approval of a WallMart in the office park but that retail uses are not permitted under the comprehensive plan or existing zoning.

Developers are responsive to what the market wants and the developing communities are well able to satisfy the requirements. A community is generally better equipped to cut off development through its land use and zoning policies than to create development. The region as a whole is better able to "channel development" through regionally controlled infrastructure investments. Currently the region does not have policies designed to match the economic and social disparities we now find within the metropolitan area.

CASE STUDIES

Three case studies describe the process of how private corporations make their decision to locate in a specific part of the metropolitan area. The first case uses the decision of Health Partners (the parent company for Group Health Inc. following its merger with MedCenters 1992) to consolidate/relocate its headquarters from the central cities to the I-494 strip in Bloomington. The second case examines the decisions of three companies to locate in the industrial/business parks in northern Chaska - a growing suburb in the developing portion of the metropolitan area. The third case involves the consolidation/relocation of back-office bank activities of the First Bank Systems into Energy Park on a site that had been contaminated by prior industrial use.

The individual case studies describe the circumstances under which the location decision was made, the objectives of the corporation, how the corporation evaluated options, and how the public sector influenced the choices considered and finally made by the private business. Each case study ends with an overall summary of the factors seen as crucial to the final decision and commentary on whether regional/local policies impacted the decision.

HEALTH PARTNERS

In 1992 Group Health and MedCenter Health Maintenance Organizations (HMOs) merged to create the largest HMO in the state. The merger also exacerbated a longer term problem of providing space for a rapidly growing administrative and headquarters staff of approximately 1,000 located in four different buildings.

The current headquarters at 2829 University Avenue S.E., just east of the University East Bank Campus, was purchased by the corporation in 1987 after leasing the facility for six years. Six years later the corporation has outgrown not only its own building but additional leased space down the street in the Court International building. The search for larger space, sufficient to accommodate up to 1,500 employees, began in 1991. The

search and negotiation process followed two tracks. One pursued the option of purchasing an existing building in downtown St. Paul. The other searched for leased premises with the assistance of a tenant representative firm. Both options were attractive because of high vacancy rates in metropolitan office markets in both central city and suburban locations.

The criteria given to its agents in the search provides insight into the firm's set of values:

- Preference for either downtown Minneapolis or St. Paul - given a desire to maintain personal connections between the top administrative staff and the business community.
- "Middle quality space" - to avoid potential criticism of high costs for administrative and training functions in a high-cost and cost-conscious industry.
- Convenience for employees and sales personnel - in part based on ability to have transit service available and in part based on employee attitudes toward alternative locations.
- Generous, convenient and affordable parking - governed in part by a union contract specifying "free parking" and high parking demand generated by the training services for staff from thirty outlying clinics.
- Space sufficient to accommodate 1,500 employees on a longer range basis - i.e., net leasable area of 200,000 to 250,000 sq. ft. or a building of not less than 300,000 sq. ft. GLA.

These criteria would appear to favor either of the two central city downtowns, especially since a high proportion of employees lived north and east of the current facility. The criterion of convenience tended to rule out sites south of the Minnesota River and in the growing fringe in the southwest sector. The criterion of leasing a large amount of existing

space eliminated the northern suburbs simply because these communities did not have available buildings. The parking criterion worked against a downtown site. The "middle quality" space criterion should have eliminated serious negotiation with Class A space in downtown Minneapolis, but in fact it did not because of attractive rent opportunities.

Several factors, not formally listed, arose during the search. One was the design of the building - its efficiency measured in square feet per floor. A second factor related to the place of residence of the chief executive officer - close to downtown St. Paul - and the perceived contribution that Group Health could make to this downtown area which had recently lost 1,200 employees at West Publishing and had a large amount of vacant office space at the Town Square towers. A third factor related to the sale of the current building on University Avenue whose current market value was significantly less than the \$7.8 million paid for the building in 1981 and the outstanding \$7 million mortgage on the building.

Underlying all of the above were the economic factors - annual costs, capital costs and financial terms of disposing of the current building on University Avenue.

Serious negotiations occurred for purchasing space in downtown St. Paul, focusing on the NCL tower as the preferred choice.

The leasing option included buildings in downtown Minneapolis, with the preferred choice the Class A Lincoln Centre building. Both cities aggressively courted the corporation with significant competition between the Minneapolis Community Development Agency and St. Paul's Planning and Economic Development Department as to which could offer the more attractive financial package. Both cities were in a position to be the sponsor city for a \$50 million tax exempt bond issue that Group Health needed for capital expansion.

Negotiations with St. Paul depended heavily on the availability of sufficient square footage for current and future space needs, allocation of parking, and costs of parking to employees and disposition of the current

building. The City was willing to use a substantial portion of \$4.6 million in tax increment district funds toward Group Health's purchase of the NCL building and offered to subsidize several hundred parking spaces in a new parking ramp at 7th and Robert Streets. The City package included 400 spaces at \$28/month at the new ramp plus 300 spaces in an open lot and an option to purchase an interest in the ramp after ten years - a package valued at \$5.5 million. However, Travellers Insurance held the mortgages of both the NCL tower and the Group Health building and no deal could be made to get a favorable sale of the University Avenue building. The City was not in any position to be the buyer.

Negotiations with the MCDA and owners of the Lincoln Centre building followed a similar path as in St. Paul, with parking availability and costs a primary concern. The stumbling block was the sale of the existing building, plus higher operating costs.

The Ceridian building at 81st Street and 34th Avenue in Bloomington (former Control Data headquarters, sold in 1985 under a sale leaseback arrangement with Ceridian leasing and sub-leasing space) was finally chosen by the corporation as the new headquarters when it was clear that neither downtown office markets met all criteria. The final agreement involves a lease of 224,000 sq. ft. in a building of 455,000 sq. ft. with a future 50,000 sq. ft. being negotiated in 1993 for space in the adjoining Atrium Center. Based on current space needs, the downtown locations would not have been able to provide sufficient space. The fifteen-year lease, with two five-year renewable options includes a mortgage non-disturbance clause to the leasing terms, allows for further expansion, includes use of the site's 1400 parking spaces, plus 40 stalls in a secured overnight parking lot and half the garage spaces (55 stalls at additional cost). The agreement also includes terms for sharing operating expenses for the University Avenue building between Ceridian and the Health Partners up to January 1994, with Ceridian marketing the building and agreeing to take title themselves if the building is not sold by that time. The asking price for the building was set at \$3 million.

Assessment of the Factors Affecting the Decision

The principal stakeholders in this decision included the Health Partners Board of Directors, the development agencies of both central cities, the owners and mortgage holders of the buildings under consideration, and the leasing/marketing agents for these buildings. Current employees and the chief executive officer of the corporation should be added to this list since their preferences carried significant weight.

In the final analysis it is apparent that "downtown" is now in a much weaker competitive position within a metropolitan office market than it was a decade ago. Many office functions (including Health Partners) do not require multiple personal interactions among related businesses to carry out their daily activities and the prestige of the location can be a negative factor if it appears "luxurious". Convenience for employees to use their lunch hour and after work time to shop or for entertainment is less of a draw (Ceridian may run a free daily lunch hour shuttle bus to the Mall of America to match that convenience). Downtowns still enjoy the greatest accessibility for transit users, but they no longer have the same monopoly position. The Mall of America, for example, serves as a minor transit hub and MTC is consulting with Health Partners on transit needs of their employees for route and schedule improvements. The most serious handicap for the downtown office market is viewed by leasing agents as the lack of convenient and "free" parking. In part, this drawback is a financial one to either the employer or employee, but in part it is the perception of inconvenience. Walking three blocks through downtown may be less acceptable than walking 900 feet across a large parking lot.

This last point is an important factor when decision makers are faced with suburban location options where all other economic factors on capital/operating costs are relatively equal. On a scale of 1 to 5, with 1 meaning the most preferred location, the results of an employees' survey returns ranked the airport location as most preferred (2.69). The two central business districts came in below the Ceridan building and had very comparable scores (2.97 and 3.01). Their least preferred options were West Bloomington and the western suburbs (scoring 3.16 and 3.46

respectively). It appears that a combination of convenient and no-cost parking and minimizing distance travelled were the important criteria for employees.

Central cities are obviously marketing their downtowns aggressively and are willing to offer generous subsidies to attract major employers. Tax increment resources and willingness to write down parking costs at public ramps were offered, but governments do not have the same flexibility as the private sector to cover all of the financial concerns of an individual firm. In this case the loss of market value of the existing corporate headquarters building produced a real obstacle. In all likelihood it was not the only consideration, but it made a difference in how the final decision was made.

The overall weak office market and resulting rapid decline in the market value of existing office space proved to be both an asset and a liability in this case study. It offered prospects of getting quality space at relatively low cost (either as owned or leased space) but it gave the mortgage holders a very significant role in determining the outcome.

Some of the factors cited in the literature, including locational preference of the top management were considered. The CEO's preference for downtown St. Paul might have prevailed, all other factors being relatively equal. But this is speculative at best. Locational factors (in terms of accessibility) were less important than the bottom line, the parking and the functionality of space.

CHASKA INDUSTRIAL PARKS

Chaska markets itself in the metropolitan area as a "Quality Small Town" with a goal of keeping its freestanding center image at the same time as it accommodates significant growth. The city is growing in both directions - northward from the early town center along the Minnesota River and southward from T.H. 5 and the Jonathon new town. The largest industrial area is on the northeast side, part of Jonathon, with an older industrial district along the river (see appendix Map). Marketing literature

for the Chaska Industrial Parks cites the charm of the small town, the progressive business atmosphere and responsive government... "...With hundreds of acres of wooded and rolling land designated for industrial use, there is plenty of room for your company to expand". Rolling terrain is not often cited as the attraction for industrial users, but this language fits the community's mission statement and development costs are less significant than the landscape amenity for high-tech industries.

The City lies in the path of rapid growth in the southwest suburbs and is a logical search area as vacant non-residential sites are absorbed into the market from Edina, into Eden Prairie and Chanhassen. Upgrading of T.H. 5 has improved accessibility. Upgrading of T.H. 212 in the south has been long promised but not yet realized.

In 1990 Chaska ranked 20th in the state among the top 25 communities in number of manufacturing companies²⁶ (56 firms). Eden Prairie ranked fourth with 146 firms. During the 1980s the amount of land used for industry more than doubled (from 175 acres to 425 acres) and the city projects an additional 300 acres will be taken up during the 1990s. Almost no growth occurred during the 1980s in commercial land acreage and only 55 acres of commercial development is projected for the 1990s. At such time as T.H. 212 is upgraded through the City a large vacant area in the township will become ripe for development and the comprehensive plan identifies a new large industrial area in the extreme southeast sector of the city (see appendix Map). The city does not enjoy similar locational advantages for retail or office space - it is still too far out on the fringe.

Jonathon Industrial Parks

The 1985 Redevelopment and Tax Increment Financing district approved by the City provided the financial resources to install necessary public infrastructure within the Jonathon Industrial Park, Crosby Industrial Park, Jonathon Industrial Park North and the quality of the industrial area adjacent to American Crystal along the Minnesota River. The use of tax increment financing is widespread throughout the developing suburban

communities, but there are some features unique to the Chaska project - designation relied on the blighting impact of flood hazards for the entire lower part of the City with the Army Corp of Engineers estimating project costs at \$30 million for flood control. The City's share was between \$6 and \$9 million of that amount. The flood control project provided the opportunity to include the northern industrial park areas within the district and still have 70% of parcels considered "blighted".- i.e. subject to flood hazards. The City was thus able to create a TIF district with non-contiguous parcels within a larger redevelopment district that included both older industrial areas and "greenfield" sites which needed major public improvements to market the land (see appendix Map).

Public infrastructure improvements for sewer, storm sewer, water and road improvements were all needed for the Jonathon industrial areas. Tax increment financing has been the **key tool for attracting significant new industrial development** in recent years and meeting the community's following goals²⁷:

- Increase the pace of industrial development that would not normally occur.
- Ensure high quality development.
- Build a healthy industrial tax base.
- Increase demand for Chaska's Utility Division (electric and water) to supplement the general fund and thus stabilize property taxes.
- Enhance the City's sense of community by creating a strong and diversified job base in the industrial sector.

TIF can be applied toward land write-down, water and sewer connection charges, building permit fees and special assessments. In practice, the land write-down provision has been used in most instances.

Conditions for receiving TIF include: an executed contract with the owner that provides for a letter of credit in favor of the EDA for any and all up-front payments made utilizing TIF; a minimum market value in a recordable Assessment Agreement and minimum tax increment guarantee; a minimum tax guarantee until the City/EDA has paid in full any bonds

associated with the upfront tax increment payment. The "pay-as-you-go" method of receiving tax increment requires no letter of credit or tax increment guarantee.

A company acquiring sufficient land to permit at least 50 percent expansion of the building at a future date becomes eligible for a subsidy equivalent to the first three years of tax increment created by the investment. That is, the City will write-down costs up to the amount of three years of the additional property taxes generated by the development. A maximum subsidy of the equivalent of two years of the increment is allowed if no expansion space is provided.

Following is a brief description of how three firms have taken advantage of the City's policies, described above, since 1990.

LEWIS ENGINEERING

This is a privately-owned company manufacturing steel products for bridges and is considered "heavy industry". It requires outdoor storage space and was previously located in Edina at 50th street and T.H. 100 - one of a small group of industries next to Jerry's Foods. The company had outgrown its 25,000 sq. ft. building, and its location in Edina was not an appropriate site for this type of operation.

The search for a new facility was limited by the following factors: desire to remain in the western suburban area, need for an industrial area where outdoor storage was permitted, cost of land, and ability to use a community's TIF subsidies. Chaska fit the bill on all counts. The company's employees are primarily skilled welders and machinists and live throughout the metropolitan area with no special concentration in any sector. Employee resistance to the move was thus minimal; the firm's owner's familiarity with the area and residence in the southwest suburbs made the Chaska location personally convenient.

The company purchased 12 acres at \$25,000 an acre and built a 100,000 sq. ft. building to suit its operations. It brought between 50 and 60 new

employees to the City. The City gave the company a three-year write-down on the land equivalent to the first three years of tax increment.

LIFECORE BIOMEDICAL

This is a publicly-held corporation with highly specialized manufacturing processes that require special piping and also a stable supply of pure water. The company manufactures sterile medical devices and employs scientists, engineers and highly skilled craftspeople. The company previously occupied leased premises close to the University of Minnesota in Minneapolis adjacent to Williams Arena. The premises covered half a city block and when the company outgrew this space it leased additional space at Hennepin and I35W in Minneapolis. Prior to the move to Chaska in 1991 it employed 50 persons. A survey of place of residence of employees showed a very dispersed pattern - from North Minneapolis to St. Paul and many southern suburbs.

The search for new premises was controlled by the following factors: a site and building large enough to permit strong future growth at the one location; a new building, since retrofitting to meet the specifications for the manufacturing process would be very expensive; high quality water supplies (consistent temperature and consistent quality - a feature not available through the Minneapolis municipal water system); convenience for top management (living in western suburbs); financial assistance from the local community.

The company was able to satisfy all these condition in the Jonathon Industrial Park. A 33-acre site was purchased and a 65,000 sq. ft. building was built using Industrial Revenue Bonds floated by the City. Land costs were written down through a three-year tax increment subsidy. Water for the operations is drawn from the aquifer (not municipal supplies) and the company has an agreement with the City to discharge its treated waste water (of very high quality) into a small adjacent lake.

The company provided financial incentives to employees if they agreed to remain with the corporation following the move. These included stock.

options (up to 1000 shares valued at \$3-4 dollars a share phased in over the years) and a travel allowance added to the salary to cover any additional personal travel costs. The company now employs 108 persons and few of the initial employees left the corporation for other employment.

The company is well satisfied with its decision. It has an efficient building in a high amenity location adjacent to the Minnesota Arboretum. The water discharge agreement with the City eliminates what would have been high sewer charges. The City's financial assistance made it a cost effective move. Perhaps the only economic drawback is the higher cost of electricity from the Chaska Utility - considerably higher than from NSP.

JAMCO INTERNATIONAL

The firm started in 1980 in the owner's basement and has had several locations following changes in his residence. Just prior to the move to Chaska, the firm was located in Eden Prairie occupying 12,000 sq.ft. of leased office warehouse space. The company is in the promotional products business. It has a "Recognition Division" that manufactures, assembles or packages corporate promotional materials; it has a "School Products Division" providing similar products for school promotions; it has a "Fulfillment Services Division" which distributes the products offered by corporations through coupon clipping, etc.

As the company outgrew its Eden Prairie space, the owner constrained his search for a new location by the following factors: only southwestern suburbs considered because of convenience to owner and growth potential in this sector; favorable economic terms for acquiring land and building; convenience to the airport in Bloomington and the Flying Cloud airport for private jets of customers and use by the sales force; quality image of the site (the firm is in the "image business").

A realtor was used to examine opportunities although the owner was familiar with the Chaska area. In late 1991 the company purchased a site of between six and seven acres with a view over the Hazeltine golf course;

the company qualified for the land write-down, equivalent to three years tax increment. Land was priced at \$40,000 an acre with an additional \$65,000 per acre special assessments for infrastructure improvements. A 56,000 sq.ft. building was financed through the SBA. The firm size is just over 30 persons. The owner cited the amenity of the golf course and adjacent lake, the IDS training center, and the University of St. Thomas as contributing to a high quality environment for the operation.

Assessment of the Factors Affecting Location

A combination of factors combine to make urban fringe industrial land development highly marketable, particularly in the southwest sector of the metropolitan area. Highway accessibility is good and constantly being improved, these suburbs have well above average household incomes and are "home" to many commercial and industrial executives. Dayton Hudson Corporation's selection of Southdale as the pioneer location for the first regional shopping center in the region gave a strong signal of how competitive this sector is within the metropolitan market for all types of land use.

A community such as Chaska benefits from its location in the path of high growth and from early land use planning and public sector support of industry to sustain a relatively self-contained community. While Jonathon as a "new town" failed to meet its early promise, that planning set aside large industrial park areas in the northern sections and the land was marketed as part of the T.H. 5 corridor development. Jonathon was more successful in its attraction of jobs than in its residential villages and small scale commercial development. Industrial jobs are more readily dispersed geographically than are retail or office commercial. Employees can pretty much live anywhere in the metropolitan area without exceeding a 30-minute commute. Industry does not have to rely on the purchasing power of the immediate trade area as does retail.

Industrial development needs good highway access, centralized sewer and water services, low land costs, location in the path of growth, and a receptive city willing to use public subsidies to attract jobs. The

reputation of the community as a good place to live, particularly for those making investment decisions, is a further competitive advantage. Fringe areas do not have to contend with the problems of polluted sites (at least not as a rule), large sites are available for businesses seeking to expand and they usually have the further advantage of using TIF to reduce the front-end development costs (both public infrastructure and private land acquisition). It is therefore not surprising that industrial job growth is still moving out from the core.

ENERGY PARK AND FIRST BANK

The development of Energy Park was a very atypical inner city redevelopment project. First, it encompassed an exceptionally large site - 218 acres of under-developed land sandwiched between two major rail lines in St. Paul's Midway District. Second, it included 36 acres with extensive soil contamination at the former Koppers Coke site. Third, it was redeveloped as part of an experiment in fast-tracking public approvals under the Negotiated Investment Strategy and had a mixture of uses - industrial, business office park uses, specialized "festival market" retail, and high density townhousing and apartments. Within Energy Park, the ETA property (ETA was a computer hardware subsidiary of Control Data Corporation) was selected as a case study because its site was part of the Koppers Coke property and illustrates the special difficulties faced by inner cities in re-marketing environmentally polluted land. (see appendix Map of Energy Park)

Ironically, Koppers Coke was shut down in 1978 by the Environmental Protection Agency for reasons of severe air pollution but land and ground water pollution problems have since created marketing difficulties. Soil remediation was required under the Pollution Control Agency rules when carcinogenic materials were found on the site. Some of these materials had percolated into a perched water table, although the underlying aquifer was not at risk. The property is one of the Superfund listed sites and financial assistance was used to remove contaminated soil. This was completed by 1984. The ground water problems, however, were not resolved.

The 36-acre site had been initially purchased by the St. Paul Port Authority in its role as developer for the entire Energy Park and 24 acres sold to Control Data Corporation for one dollar for its new ETA facility in 1984. CDC was indemnified by the Port Authority from environmental liability. ETA's building of 120,000 sq. ft. was specially designed for computer operations. Tax exempt bonds were issued by the Port Authority to finance the building.

Five years later ETA went out of business. CDC paid off the building debt. CDC believed it had reached an agreement in Fall of 1989 to sell the building to 3M as a research facility for \$5.6 million dollars (below initial costs) and the City was ready to give 3M the same indemnity for environmental liability. For multiple reasons, not only the liability concerns, the sale did not go through.

In 1990 First Bank Systems began its search for new "back office" functions and reached agreement with Ryan Construction Company for the company to find/build a facility for the bank to lease. The bank's operations required a more efficient "horizontal" building layout than the existing downtown St. Paul bank building. The ETA building and the Johnson building along T.H. 55 in Golden Valley were final contenders, with the Energy Park location finally selected. The success in putting together this project won the National Association of Industrial and Office Parks (NAIOP) 1992 award as the "Most Creative Transaction" for 1992! (See appendix for summary of the project prepared for the award ceremony).

It is instructive to note the complexity of marketing a formerly polluted site. Koppers' parent company had operations on 50 polluted sites across the U.S., and its products had been traced to a 100 different landfills. The \$57 million corporate reserve for losses from pollution clean-up activities could be readily exhausted. Sun America Insurance Company (Los Angeles), however, had previously closed on two other Koppers sites and was willing to take the risk of a \$34.5 million mortgage.

The public interest involved in the transaction was also a significant factor. The Port Authority had to realign a chain of users within its TIF district in order to sell \$3.5 million of new bonds and gain support from its Board (in fact \$10 million of bonds had to be issued in order to place the project second in line as a creditor). The Board had several concerns: the overall financial viability of the Energy Park TIF district; the ability to realign creditors; the inability to use the "pay-as-you-go" TIF financing because of up-front cash needs to satisfy the loan-to-value criterion; and concerns over the potential loss of a large number of jobs from St. Paul if the Bank moved its operations to Golden Valley. The Board and City Council also needed confirmation that "but for" this financial assistance the project would not go forward in St. Paul.

The public interest was guaranteed by clauses in the final agreement with Ryan: developer to contribute \$2.4 million to the project prior to any commitment of TIF funds; that if at any time less than 680 employees are employed at the site for more than 180 days in a twelve month period, the developer will make principal and interest payments due on the bonds during the period of the employee shortfall; that the minimum market value of the property as of January 2, 1992 shall be no less than \$6.75 million dollars and as of January 2, 1993 and thereafter, shall be no less than \$13.5 million. The developer also was required to guarantee at least \$789,602 of tax payments annually from 1994 to 2007 (the maturity date of the bonds). Note that this was a \$40 million project.

Assessment of the Factors Affecting the Location Decision

The NAIOP words of "most creative transaction" are very appropriate. The project needed the public sector to provide financial subsidies to the developer - using the state enabling TIF legislation and a public purpose development agency with skilled staff to negotiate. The threat of losing a significant number of employees from the City and reducing the financial strength of the Energy Park TIF district were powerful motivations for the public sector to take a very proactive role in negotiating a sale to Ryan.

The transaction could not have been consummated if the City/Port Authority had not been able to satisfy the lender on environmental liability by the Port Authority indemnifying Ryan (plus Koppers indemnity on the ground water issue) and by the City creating a special Hazardous Substance Sub-District to TIF which allows the city's full tax base to be used in the event of a future incident.

The developer's risk (in this case Ryan, and not First Bank System) obviously had to be matched with potential financial gain and perhaps here the unique qualities of the ETA building played a significant role. The building was single story and designed with some redundancy in its mechanical and electrical systems and thus it fit well with the special needs of the bank's operations and the check-clearing activities. Utility to this specific user exceeded the building's market value but a large additional investment was made to install major redundancy for their communications/computer operations. Approximately half of the total investment was to insure full reliability of their on-line communications.

The legal frameworks at national, state and local levels covering environmental risk are critical factors when marketing any Superfund site. In this instance, the other factors made it possible to address the legal issues and create an acceptable level of risk to all parties.

LESSONS LEARNED

1. *The challenge is not to constrain development in the developing area but to allocate resources to cope with the process of aging, changing technologies (and thus shifting relative locational advantage) and recycling the built environment.*

It is clearly not a level playing field for the inner cities and an increasing number of fully developed suburbs in the competition for new commercial and industrial development. The older communities have multiple handicaps: lack of large sites; contaminated sites; obsolete structures; declining property values in an over-built market; stabilization or loss of market share of the region's purchasing power. Existing tools of tax increment financing are available to the developing communities, as they are to the older ones. TIF alone is not sufficient to match the higher costs of developing in the FDA.

2. *The political fragmentation of the region and increasing reliance on the local property tax to finance services contribute to the problems of the FDA.*

The sharing of commercial/industrial tax base within the region is a very positive step toward equalizing resources, but it is clearly inadequate to counterbalance the ever present advantages of urban fringe sites in a region well provided with highways, sewers and natural amenities.

3. *Over-building of the office and spec light industrial buildings gives the region a breathing space to consider new policies to assist reinvestments in the Fully Developed Area.*

Built-to-suit projects are still strong pieces of the market, but the projected absorption pace of new space is generally low. Many buildings have values well below cost, and outstanding debt, and thus offer more attractive opportunities than building new. Existing projects within the FDA will thus be attractive options for buyers.

4. Lending institutions and place of residence of persons making locational decisions are key factors.

Underwriting standards and risk avoidance of lenders make investments in fringe locations more attractive. The FDA thus has to rely more heavily on their economic development agencies and public sector financing. Most of the metropolitan communities have become sophisticated in their ability to use their public powers to develop and redevelop sites.

Where business owners live is an important factor in selecting a location for a new or growing firm. In part, this is because the owner is more familiar with the sector and thus searches more narrowly than the full metropolitan area; in part it is image and lower travel times.

5. The image value of central business districts is becoming less with the growth of service industries, new communication technologies and high tech industries.

The need for and the prestige of a downtown location is still important, but for fewer firms. A downtown location must therefore have **economic/cost advantages** to a higher degree than would have been the case in the 1960s and 1970s when many downtown blocks were redeveloped. More and more locational choices are available to both retail, office and light industry.

6. Decision makers are placing greater emphasis on convenience in terms of parking and cost of parking - a convenience that cannot be matched by downtown locations or older industrial and retail districts.

In a highly mobile society and in a region with relatively short commuting times to multiple employment sites, both corporate executives and employees want on-site parking which is viewed as "free". Parking costs are significant costs to lower paid workers and decentralized transit service to employment centers outside of the two central cities has already opened up more opportunities for transit-dependent workers to

work in suburban locations. Expanded transit service to the fringe locations is expected in the future.

7. *Where the region places and how it prices its infrastructure will have a significant impact on the market.*

Notwithstanding developers' statements that cities generally can't "create" a market, the region as a whole can affect the relative attraction of locations for new commercial and industrial investments through its infrastructure policies. These investments and programs/funds to facilitate recycling of our older commercial districts are levers to manipulate the market.

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- ⁸Borchert, John R., Notes from PA 5601.
- ⁹Cadwallader, Martin. Analytical Urban Geography, Prentice-Hall, Inc., Englewood, NJ, Chap: 6, 1985.
- ¹⁰Metropolitan Council Staff Report. Industrial Migration Trends in the Twin Cities Metropolitan Area. Publication No. 01-79-022, Section 3, 1979.
- ¹¹Bartik, Timothy J. Ibid.
- ¹²McGuire, Theresa J. *Are Local Taxes Important in the Intrametropolitan Location Decisions of Firms?*, Journal of Urban Economics, vol. 18, p. 226-234, 1985.
- ¹³Chapman, Keith. *Environmental Policy and Industrial Location in the United States*.
- ¹⁴Jones, Richard D. *In Search of Certainty: Industry's Efforts to Define Environmental Due Diligence*, from The Impact of Environmental Regulations on Business Transactions and Operations 1992, I. Leo Motiuk, Ed., Practising Law Institute, NY, 1992.
- ¹⁵There is a draft copy in The Impact of Environmental Regulations on Business Transactions and Operations 1992, but at the time of this writing the final version was not yet generally available.
- ¹⁶Blakeley, Edward J. and David L. Ames. *Changing Places: American Planning Policy for the 1990s*, Journal of Urban Affairs, Vol. 14, No. 3/4, pages 423-446, 1992.
- ¹⁷Conversations with MPCA staff and Motiuk.
- ¹⁸U.S. v. Fleet Factors Corp., 901 F. 2d 1550 is the case that is most often cited by lending institutions to explain their conservatism.
- ¹⁹Garreau.
- ²⁰TOWLE Report 1993.
- ²¹MCDA Memorandum to the Community Development Committee, March 29, 1993.
- ²²City Business, April 30, 1993, page 9.
- ²³TOWLE Report 1993.

²⁴Pollution-Clean-Up Needs for Saint Paul Job Creation, 1993.

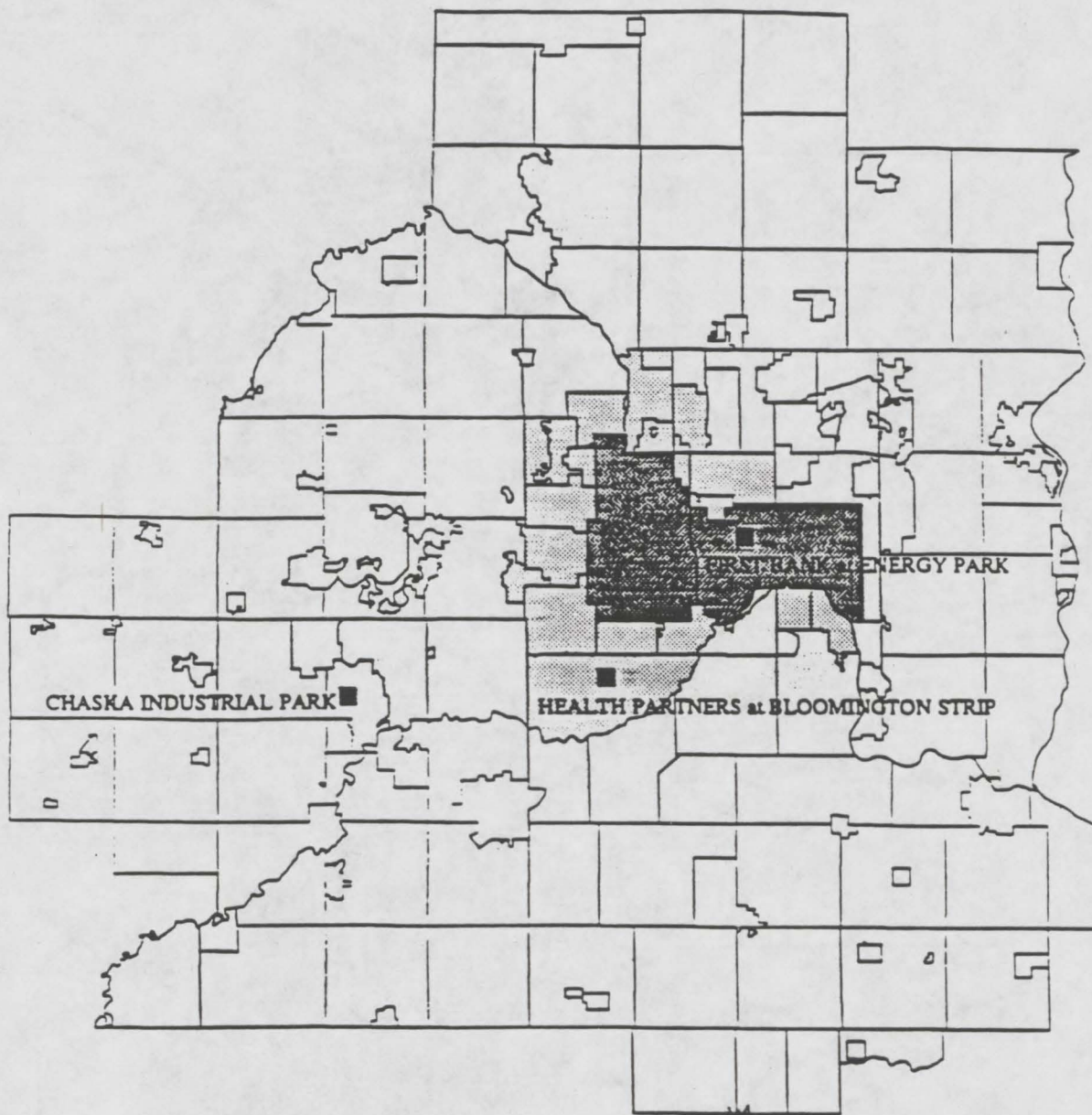
²⁵TOWLE Report 1993.

²⁶Minnesota Manufacturers, 1990.

²⁷Chaska Economic Development Authority.

Appendix

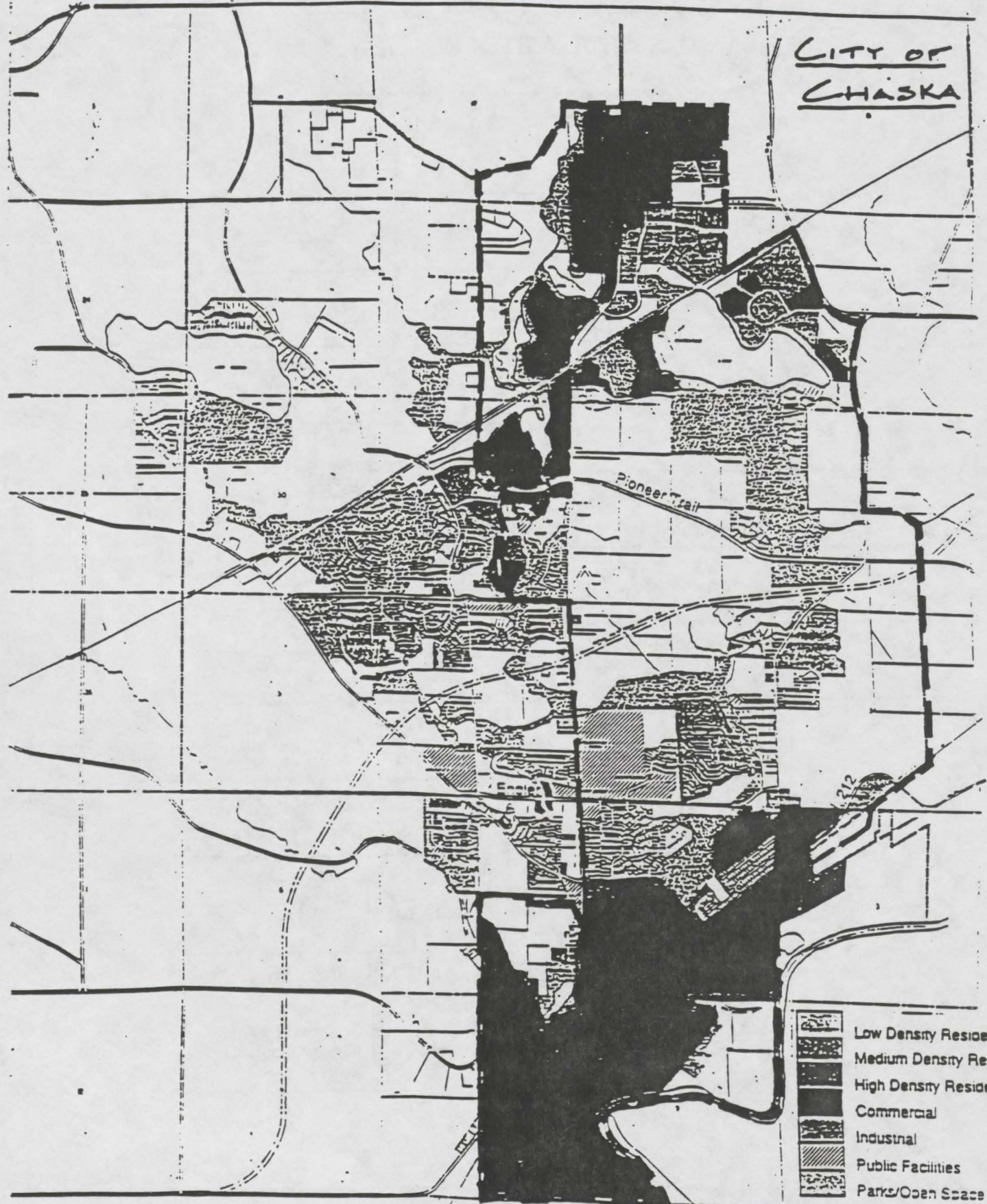
CASE STUDY SITE LOCATION












Metropolitan Areas

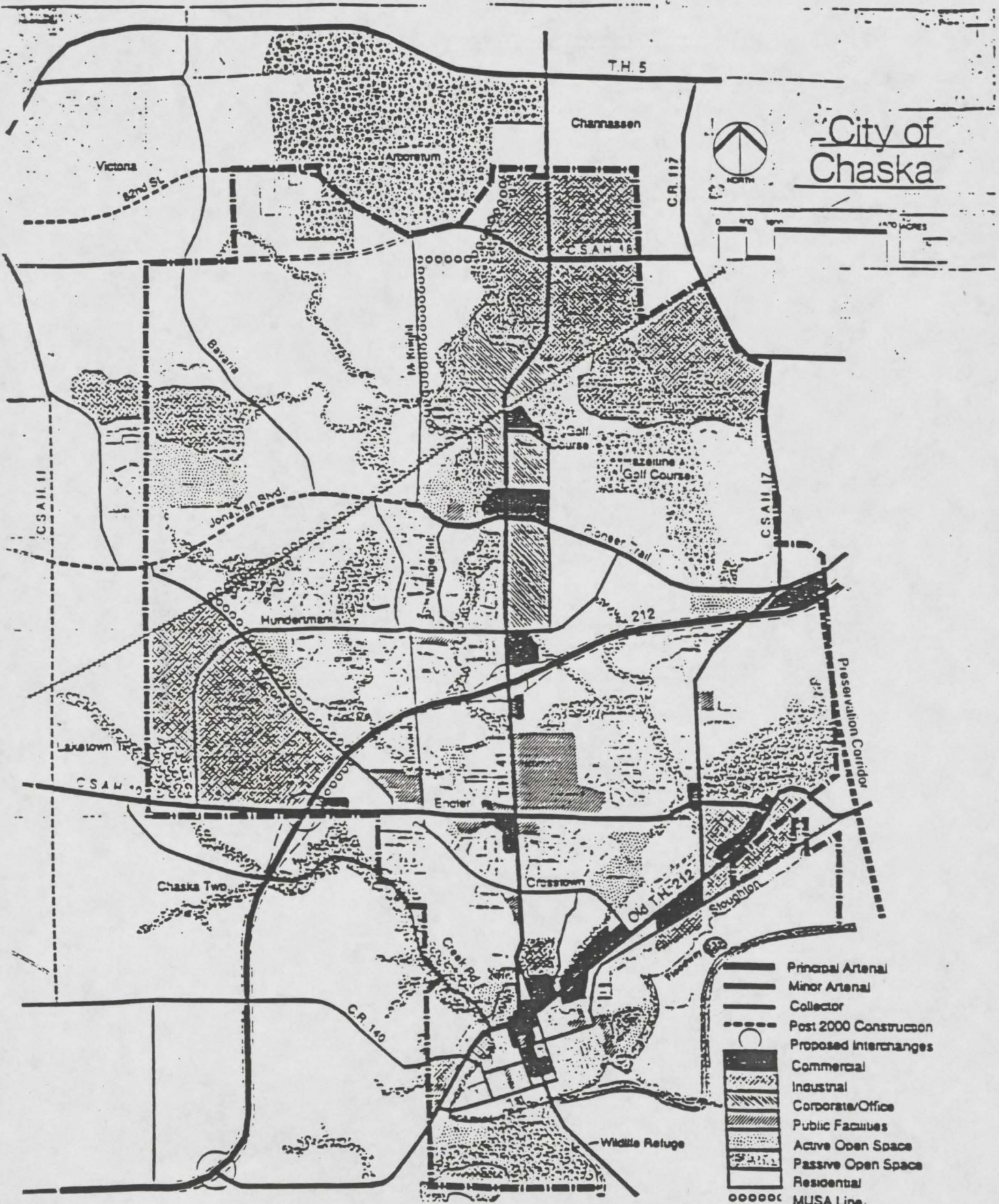
- Core cities
- Developing area
- Fully developed area
- Rural area

CITY OF
CHASKA



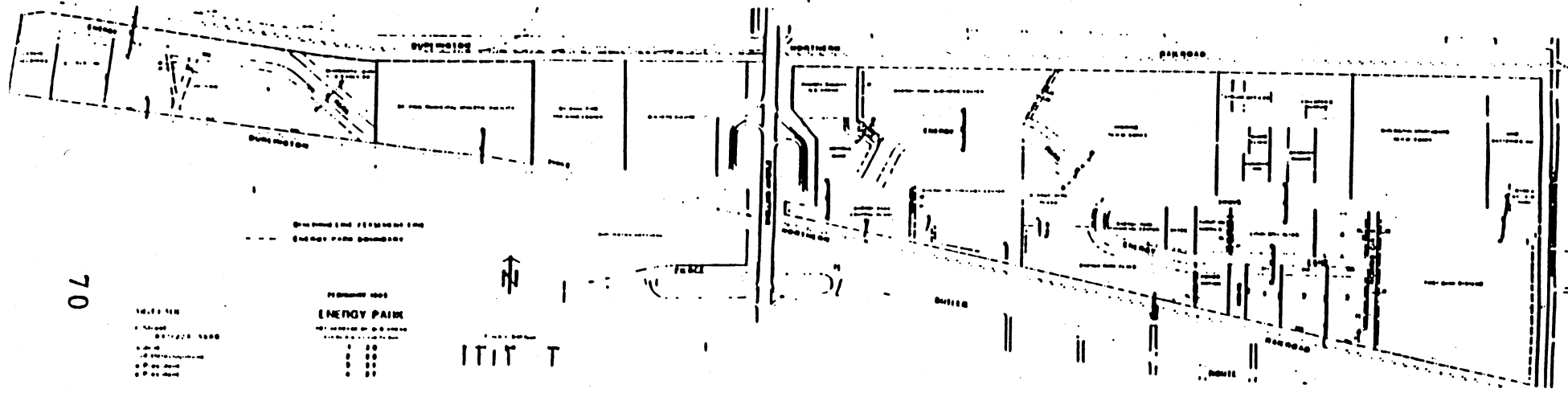
-  Low Density Residential
-  Medium Density Residential
-  High Density Residential
-  Commercial
-  Industrial
-  Public Facilities
-  Parks/Open Space

REDEVELOPMENT BOUND.  REDEVELOPMENT BOUNDARY
 TAX INC. DIST. 4...  TAX INCREMENT DISTRICT 4



City of Chaska

SAINT PAUL ENERGY PARK



70

- LEGEND
- POWER LINE
- WATER LINE
- SEWER LINE
- STREET
- RAILROAD
- PROPERTY LINE
- ADJACENT PROPERTY

PROPERTY LINE
ENERGY PARK
ADJACENT PROPERTY

ITIT T



John Lee

MOST CREATIVE TRANSACTION 1992

Submitted by:

RYAN CONSTRUCTION COMPANY OF MINNESOTA, INC.

This transaction successfully overcame many obstacles to achieve a project difficult in today's market. The transaction included the cooperation of numerous parties and involved the sale of building and land, a lease, 120,000 square foot building renovation, 260,000 square foot new construction, and complex financing to create a technologically advanced facility for the user.

OWNER/DEVELOPER: Ryan Properties, Inc.

CONTRACTOR: Ryan Construction Company of Minnesota, Inc.

LOCATION: 1200 Energy Park Drive
St. Paul, Minnesota

SELLERS: Control Data Corporation
St. Paul Port Authority

TOTAL PROJECT COST: \$40 million

START DATE: August, 1990
COMPLETION DATE: December, 1992

ARCHITECT: Symmes, Maini & McKee Associates
Minneapolis, Minnesota

STRUCTURAL ENGINEER: Symmes, Maini & McKee Associates
Minneapolis, Minnesota

MECHANICAL ENGINEER: Michaud, Cooley, Erickson & Associates, Inc.
Minneapolis, Minnesota

LANDSCAPE DESIGNER: Westwood Professional Services
Eden Prairie, Minnesota

FINANCING/EQUITY: SunAmerica - Permanent
Ryan Construction - Equity
Port Authority/City of Saint Paul - T.I.F.

POSITIVE OUTCOMES

1. Completion of a successful hi-tech facility for the user which will substantially reduce operating costs and increase operating efficiency.
2. Obtained financing in today's distressed lending market.
3. Redeveloped a vacant building site by tripling the size.
4. Utilized and created value on an existing superfund site.

CHALLENGES/OBSTACLES

1. Financing in Existing Lending Market
2. Financing for a Superfund Site

Solved by: Ryan's expertise and relationships with lenders.
Tax Increment Financing (need to refinance tax increment district as well as tax increment bond sale to provide project funds)
Owner Equity
Hazardous Substance Subdistrict
3. Environmental Issues

Solved by: Indemnity Agreements
Hazardous Substance Subdistrict
Regulatory Cooperation
4. Construction Challenges

Mechanical & Electrical Design: Solved by close integration of the project's existing systems with new state-of-the-art mechanical and electrical installations.

Schedule: Ryan guaranteed a 13 month schedule and reached substantial completion in 11 1/2 months!

Architectural: The integration of efficient and cost-effective building components and the design of highly functional interior space that met the diversified needs of First Bank Systems.
5. Future Expansion Needs

Option Property - Adjacent to Site

6. Compliance with Protective Land Covenants

Development/Construction Team
Community Cooperation
Landscaping

7. Management of process and large number of parties involved in transaction.

8. Development Agreement

9. Ryan Partnership Creation

Ryan bought in an equity partner to fund equity.

10. (Operational) Tenant Transportation Issues

Task force created to work with MTC to design and implement a new bus route.

PARTICIPANTS

Ryan Construction—First Bank Systems—St. Paul Port Authority—City of Saint Paul—Eberhardt—
CB Commercial—Legal—Regulatory

PROJECT NARRATIVE

The First Bank Systems Data Operations Center project began in 1990 when the site search began for an approximate 360,000 square foot facility. This \$40 million dollar project proceeded in Energy Park in Saint Paul on the former vacant ETA site. This site contained 24 acres and an existing 120,000 square foot building. The project was already a designated superfund site which was to greatly affect the ability to finance the project over the next couple of years.

A team of participants lead by Ryan allowed this project to go forward. The team included Ryan, First Bank Systems, the St. Paul Port Authority, Eberhardt, City of St. Paul, CB Commercial and Control Data Corporation as well as the various attorneys representing the parties already mentioned.

The environmental nature of the site necessitated a great deal of creativity and hard work to bring this project to completion. Many lenders and lending sources were sought over this time period. The final solution was found by the provision of a number of layers of indemnities, a creation of a hazardous substance subdistrict, and the commitment of a lender which had previously made loans on similar superfund sites (on which the original responsible party had operated).

The hazardous substance subdistrict, the first ever created in the City of Saint Paul, was approved by the City, County and School District and allowed the "base" of the Energy Park tax increment district to be captured from the site and adjacent properties to be used as dollars towards any necessary clean-up or testing that may be necessary in the future.

The Port Authority and the City of Saint Paul also provided approximately \$3.5 million of tax increment financing based upon the substantial number of quality jobs at this site (1,200).

Additionally, an option on an adjacent 4 acre site owned by the Port Authority was negotiated to facilitate a future expansion.

This large team of people worked cooperatively for 2 1/2 years to bring this exciting project to completion. The completed project in December, 1992 brought into existence one of the most highly technological bank data operation centers in the country.

Listed below is the team and their respective roles:

Ryan Construction	Pat Ryan	Developer, Owner
First Bank Systems	Gary Watne	FBS Representative
Eberhardt	Bob Schoening	Tenant Representative to FBS
Symmec, Maini & McKee		Architect & Engineer
St. Paul Port Authority	Julie Kimble	Tax Increment Financing, Hazardous Substance Subdistrict. Land Option, Facility Sale
City of Saint Paul	Katie Lindblad	Tax Increment Financing and Hazardous Substance Subdistrict
Control Data Corporation	Greg Lokken Gary Beusgens	Seller
CB Commercial	John Allen	Broker for Control Data Corp.
Law Firms:	Leonard, Street & Deinard Dorsey & Whitney Briggs & Morgan Maun & Simon Doherty, Rumble & Butler	
Regulatory:	Minnesota Pollution Control Agency	

WETLAND TYPES REGULATED BY FEDERAL/STATE/LOCAL PROGRAMS

<u>WETLAND TYPE</u>	<u>FEDERAL</u>	<u>STATE</u>	<u>LGU</u>
Type 1 - Floodplain Forest and Seasonally-flooded Basin	F F	/P /P	L L*
Type 2 - Wet meadow or prairie	F	/P	L**
Type 3 - Shallow Marsh	F	D/P	L***
Type 4 - Deep Marsh	F	D/P	L***
Type 5 - Open Water (Pond)	F	D/P	L***
Type 6 - Scrub Shrub Swamp	F	/P	L
Type 7 - Wooded Swamp	F	/P	L
Type 8 - Bog	F	/P	L

F = U.S. Army Corps of Engineers regulatory program

D = Minnesota Department of Natural Resources protected waters program; MDNR authority is limited to those wetlands that exceed 10 acres in size in unincorporated areas and 2.5 acres in incorporated areas - protected wetlands are listed on the Protected Waters Inventory Map

P = Minnesota Pollution Control Agency authority; MPCA utilizes the Corps Section 404 Clean Water Act program to review and certify that projects meet Section 401 state water quality standards, but it is recommended that MPCA be contacted to determine the applicability of its other regulatory authorities, e.g., Section 402.

L = Local Government Units responsible for implementation of the Minnesota Wetlands Conservation Act of 1991 (WCA). The Minnesota Board of Water and Soil Resources has overall responsibility for direction of this program, and MDNR has enforcement responsibilities.

L* = Seasonally-flooded Basins located in "agricultural areas" are exempt from WCA regulation

L** = WCA regulates only those Type 2 wetlands that are greater than 2 acres in size and are not in agricultural use. Mitigation through replacement is required for the destruction of these wetlands.

L*** = LGU's regulate those Type 3,4, and 5 wetlands that are below the size threshold regulated by the MDNR, or which are not on the Protected Waters Inventory Map.

FEDERAL WETLAND JURISDICTION:
SEQUENCE OF ANALYSIS

. IS THE AREA A WATER OF THE U.S.?

. WILL THE PROJECT INVOLVE A DISCHARGE OF DREDGED OR FILL MATERIAL INTO THE WATERBODY?

IF THE ANSWER TO EITHER OF THE ABOVE QUESTIONS IS "NO." THEN NO PERMIT OR NOTICE TO THE CORPS IS REQUIRED

. DOES THE DISCHARGE COME WITHIN ONE OF THE SIX CLEAN WATER ACT EXEMPTIONS?

IF THE ANSWER TO THE ABOVE QUESTION IS "YES," THEN NO PERMIT OR NOTICE TO THE CORPS IS REQUIRED

. IS THE ACTIVITY OR AREA AUTHORIZED BY A NATIONWIDE PERMIT?

IF THE ANSWER TO THE ABOVE QUESTION IS "NO." YOU MUST CONTINUE THE SEQUENCE. IF THE ANSWER IS "YES," YOUR PROJECT IS LIKELY AUTHORIZED BUT YOU MAY OR MAY NOT BE REQUIRED TO PROVIDE ADVANCE NOTICE TO THE CORPS. NOTIFICATION REQUIREMENTS ARE STATED IN SPECIFIC NATIONWIDE PERMITS.

. HAS THE ACTIVITY BEEN APPROVED BY THE WDNR AND THEREBY AUTHORIZED BY A REGIONAL GENERAL PERMIT?

IF THE ANSWER TO THE ABOVE QUESTION IS "YES" THE PROJECT IS AUTHORIZED. BUT NOTICE MUST BE PROVIDED TO THE CORPS. IF THE ANSWER IS "NO," THEN YOU MUST APPLY FOR AN INDIVIDUAL PERMIT AND

Variable : Type, Description	Original Source of Data
MCD_NAME: Character, same as ANPSADPI	1990 CENSUS data
CITY_OR_TOWN: Character, *DERIVED, truncates ANPSADPI to name reference e.g. ANDOVER CITY = CITY	1990 CENSUS data
DOC_ID: Character, DERIVED, truncates ANPSADPI to common name reference e.g. ANDOVER CITY = ANDOVER	1990 CENSUS data
COUNTY: Character, name of county e.g. ANOKA	1990 CENSUS data
FIPS_CODE: Number, 8 digit reference includes state, county, MCD identifiers e.g. ANDOVER CITY = 27003004	1990 CENSUS data
FIPS_COMCD: Number, 6 digit reference county and MCD e.g. ANDOVER CITY = 003004	1990 CENSUS data
FIPS_CO: Number, 3 digit reference to county e.g. ANOKA = 003	1990 CENSUS data
FIPS_MCD: Number, 3 digit reference to MCD e.g. ANDOVER CITY = 004	1990 CENSUS data
FIPS_PL: Number, 5 digit reference, FIPS Place code e.g. ANDOVER CITY = 01486	1990 CENSUS data
DEPT_REV: Number, DERIVED, 6 digit reference used by MN Dept of Revenue to identify place e.g. ANDOVER CITY = 020300	MN DEPARTMENT of REVENUE, Local Government Services Division
GROW_AREA: Character, DERIVED, Planning areas i.e. Core, Developed, Developing, Rural; not for use in time series studies	METROPOLITAN COUNCIL
TIME_RINGS: Character, DERIVED Planning areas i.e. Core, Fully Developed, Developing, and Rural; used for time series studies	METROPOLITAN COUNCIL
RINGS: Number, integer value for TIME_RINGS	METROPOLITAN COUNCIL
SECTOR: Number, DERIVED, Planning areas, 8 sectors in all which in general break QUADRANTS in half	METROPOLITAN COUNCIL
QUADRANT: Character, DERIVED, Planning areas metro quads e.g. NW, SW, SE, NE	METROPOLITAN COUNCIL
PLAN_AREA: Number, DERIVED, 2 digit reference to Planning areas 10 thru 14 e.g. FULLY DEVELOPED = 10	METROPOLITAN COUNCIL
GROW_SECTR: Number, DERIVED, 1 digit reference to PLAN_AREA regrouping e.g. PLAN_AREA (11,14) = GROW_SECTR (5)	METROPOLITAN COUNCIL
GROW_SECNAME: Character, DERIVED Character reference to GROW_SECTR, e.g. GROW_SECTR (5) = Rural Centers	METROPOLITAN COUNCIL

* DERIVED indicates that the original data was manipulated or needed to be data entered, i.e. it did not come in a machine readable

Variable : Type, Description	Original Source of Data
AVAIL_SQMI: Number, DERIVED, Total MCD acres less MCD acres of water / 640 acres to convert to SQ MI, data from a preliminary land use report	METROPOLITAN COUNCIL
TOTAL_SQMI: Number, DERIVED, Total MCD acres / 640 acres to convert to SQ MI, data from a preliminary land use report	METROPOLITAN COUNCIL
TOTAL_ACRES: Number, DERIVED, Total MCD acres, data from a preliminary land use report	METROPOLITAN COUNCIL
FIPS_PLACE: Character, FIPS_PLACE code as a character rather than a numeric value	1990 CENSUS data
ANPSADPI: Character, MCD character name	1990 CENSUS data
POP80: Number, Population 1980	1990 CENSUS data
POP90: Number, Population 1990	1990 CENSUS data
FAM90: Number, of Families 1990	1990 CENSUS data
HU90: Number, of Housing units 1990	1990 CENSUS data
URB90: Number, Population in urbanized areas	1990 CENSUS data
NONURB90: Number, Population in non-urbanized areas	1990 CENSUS data
RFARM90: Number, Rural/farm population	1990 CENSUS data
RNFARM90: Number, Rural/non-farm population	1990 CENSUS data
MALE90: Number, of Males	1990 CENSUS data
FEM90: Number, of Females	1990 CENSUS data
WHITE90: Number, of Whites	1990 CENSUS data
BLACK90: Number, of Blacks	1990 CENSUS data
AMIND90: Number, of American Indians	1990 CENSUS data
ASIAN90: Number, of Asians	1990 CENSUS data
OTHER90: Number, of Other races	1990 CENSUS data
HISP90: Number, of Hispanic	1990 CENSUS data
AGELT5: Number, Age < 5	1990 CENSUS data
AGE517: Number, Age 5 - 17	1990 CENSUS data
AGE1821: Number, Age 18 - 21	1990 CENSUS data
AGE2224: Number, Age 22 - 24	1990 CENSUS data
AGE2529: Number, Age 25 - 29	1990 CENSUS data
AGE3034: Number, Age 30 - 34	1990 CENSUS data
AGE3539: Number, Age 35 - 39	1990 CENSUS data
AGE4044: Number, Age 40 - 44	1990 CENSUS data
AGE4549: Number, Age 45 - 49	1990 CENSUS data
AGE5054: Number, Age 50 - 54	1990 CENSUS data
AGE5559: Number, Age 55 - 59	1990 CENSUS data
AGE6061: Number, Age 60 - 61	1990 CENSUS data
AGE6264: Number, Age 62 - 64	1990 CENSUS data
AGE6569: Number, Age 65 - 69	1990 CENSUS data
AGE7074: Number, Age 70 - 74	1990 CENSUS data
AGE7579: Number, Age 75 - 79	1990 CENSUS data
AGE8084: Number, Age 80 - 84	1990 CENSUS data
AGEGT85: Number, Age > 85	1990 CENSUS data

Variable : Type, Description	Original Source of Data
92NEW_PER: Number, DERIVED, number of permits for NEW construction from December list FY 1992, year-to-date with imputations for items 318-329	METROPOLITAN COUNCIL
92NEW_VALUE: Number, DERIVED, assessor's estimated market value of NEW construction from December list FY 1992, year-to-date with imputations for items 318-329	METROPOLITAN COUNCIL
92ADD_PER: Number, DERIVED, number of permits for ADDITION construction from December list FY 1992, year-to-date with imputations for item 417	METROPOLITAN COUNCIL
92ADD_VALUE: Number, DERIVED, assessor's estimated market value of ADDITION construction from December list FY 1992, year-to-date with imputations for item 417	METROPOLITAN COUNCIL
90NEW_PER: Number, DERIVED, number of permits for NEW construction from December list FY 1990, year-to-date with imputations for items 318-329	METROPOLITAN COUNCIL
90NEW_VALUE: Number, DERIVED, assessor's estimated market value of NEW construction from December list FY 1990, year-to-date with imputations for items 318-329	METROPOLITAN COUNCIL
90ADD_PER: Number, DERIVED, number of permits for ADDITION construction from December list FY 1990, year-to-date with imputations for item 417	METROPOLITAN COUNCIL
90ADD_VALUE: Number, DERIVED, assessor's estimated market value of ADDITION construction from December list FY 1990, year-to-date with imputations for item 417	METROPOLITAN COUNCIL
COMMERCIAL80: Number, DERIVED, Total MCD Commercial acres 1980, data from a preliminary land use report	METROPOLITAN COUNCIL
INDUSTRIAL80: Number, DERIVED, Total MCD Industrial acres 1980, data from a preliminary land use report	METROPOLITAN COUNCIL
COMMERCIAL90: Number, DERIVED, Total MCD Commercial acres 1990, data from a preliminary land use report	METROPOLITAN COUNCIL
INDUSTRIAL90: Number, DERIVED, Total MCD Industrial acres 1990, data from a preliminary land use report	METROPOLITAN COUNCIL
EMPLOY80: Number, DERIVED, TAZ employment summed by MCD 1980	METROPOLITAN COUNCIL
EMPLOY90: Number, DERIVED, TAZ employment summed by MCD 1990	METROPOLITAN COUNCIL
EMP_DIFF: Number, EMPLOY90 less EMPLOY80	METROPOLITAN COUNCIL

Variable : Type, Description	Original Source of Data
DIFF/EMP80: Number, EMP_DIFF / EMPLOY80 % change from 1980 level	METROPOLITAN COUNCIL
CERCLIS: Number, DERIVED, of CERCLIS (Comprehensive Environmental Response, Comensation, and Liability Information System) sites per MCD	MN POLLUTION CONTROL AGENCY
NLP: Number, DERIVED, of NPL (National Priority List) sites per MCD, federal Superfund	MN POLLUTION CONTROL AGENCY
PLP: Number, DERIVED, PLP (Permanent List of Priorities) sites per MCD, state Superfund	MN POLLUTION CONTROL AGENCY
HW_PER: Number, DERIVED, of Hazardous waste site permits, does not imply current contamination	MN POLLUTION CONTROL AGENCY
HW_ENF: Number, DERIVED, Some past enforcement action at the hazardous waste site , does not imply current problems or contamination	MN POLLUTION CONTROL AGENCY
SW_PER: Number, DERIVED, of Solid waste site permits, does not imply current contamination	MN POLLUTION CONTROL AGENCY
METRO_ODI: Number, DERIVED, a site where uncontrolled disposal has taken place in the past. Many are former open dump sites posing insignificant contamination problems	MN POLLUTION CONTROL AGENCY
PTI: Number, DERIVED, a site that is being voluntarily investigated or cleaned up by a buyer, seller, or other party interested in developing the proprty.	MN POLLUTION CONTROL AGENCY
ENVIR_SUM: Number, DERIVED, Sum of CERCLIS, NPL, PLP, HW_PER, HW_ENF, SW_PER, METRO_ODI, and PTI	MN POLLUTION CONTROL AGENCY
SITE_TOTAL: Number, DERIVED, of locations, this is often less than ENVIR_SUM because a specific site may be listed more than once e.g. a dump in ANDOVER CITY may be on the CERCLIS, PLP, and PTI lists, so its ENVIR_SUM = 3 while its SITE_TOTAL = 1	MN POLLUTION CONTROL AGENCY
93CONTRIB: Number, DERIVED, Final Contribution Tax Capacity 1993	MN DEPARTMENT of REVENUE, Local Government Services Division
93DISTRIB: Number, DERIVED, Final Distribution Tax Capacity 1993	MN DEPARTMENT of REVENUE, Local Government Services Division
93D_LESS_C: Number, Distribution less Contribution 1993	MN DEPARTMENT of REVENUE, Local Government Services Division
93%_DIFF: Number, (Distribution less Contribution) / Contribution or Difference as a % of Contribution 1993	MN DEPARTMENT of REVENUE, Local Government Services Division
90CONTRIB: Number, DERIVED, Final Contribution Tax Capacity 1990	MN DEPARTMENT of REVENUE, Local Government Services Division

Variable : Type, Description

Original Source of Data

90DISTRIB: Number, DERIVED, Final Distribution Tax Capacity 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
90D_LESS_C: Number, Distribution less Contribution 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
90%_DIFF: Number, (Distribution less Contribution) / Contribution or Difference as a % of Contribution 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
85CONTRIB: Number, DERIVED, Final Contribution Tax Capacity 1985	MN DEPARTMENT of REVENUE, Local Government Services Division
85DISTRIB: Number, DERIVED, Final Distribution Tax Capacity 1985	MN DEPARTMENT of REVENUE, Local Government Services Division
85D_LESS_C: Number, Distribution less Contribution 1985	MN DEPARTMENT of REVENUE, Local Government Services Division
85%_DIFF: Number, (Distribution less Contribution) / Contribution or Difference as a % of Contribution 1985	MN DEPARTMENT of REVENUE, Local Government Services Division
80CONTRIB: Number, DERIVED, Final Contribution Tax Capacity 1980	MN DEPARTMENT of REVENUE, Local Government Services Division
80DISTRIB: Number, DERIVED, Final Distribution Tax Capacity 1980	MN DEPARTMENT of REVENUE, Local Government Services Division
80D_LESS_C: Number, Distribution less Contribution 1980	MN DEPARTMENT of REVENUE, Local Government Services Division
80%_DIFF: Number, (Distribution less Contribution) / Contribution or Difference as a % of Contribution 1980	MN DEPARTMENT of REVENUE, Local Government Services Division
NO_DIST92: Number, DERIVED, of Tax Increment Districts 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
TOTAL92: Number, DERIVED, Total Tax Increment Tax Capacity 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
CAPT_INCR92: Number, DERIVED, Captured Tax Capacity 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
INC92/TOT92: Number, DERIVED, % of Total actually captured 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
GROSS92: Number, DERIVED, Gross Tax Increment tax 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
CREDITS92: Number, DERIVED, Adjustment to current year tax by base year tax 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
NET_TAX92: Number, DERIVED, Tax Increment Net Tax, actual moneys returned to MCD Tax Increment District 1992	MN DEPARTMENT of REVENUE, Local Government Services Division
TOTAL90: Number, DERIVED, Total Tax Increment Tax Capacity 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
CAPT_INCR90: Number, DERIVED, Captured Tax Capacity 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
INC90/TOT90: Number, DERIVED, % of Total actually captured 1990	MN DEPARTMENT of REVENUE, Local Government Services Division
NET_TAX90: Number, DERIVED, Tax Increment Net Tax, actual moneys returned to MCD Tax Increment District 1990	MN DEPARTMENT of REVENUE, Local Government Services Division

Variable : Type, Description	Original Source of Data
TOTAL83: Number, DERIVED, Total Tax Increment Tax Capacity 1983, Assesd values and not to be compared to post 1990 figures	MN DEPARTMENT of REVENUE, Local Government Services Division
CAPT_INCR83: Number, DERIVED, Captured Tax Capacity 1992, Assessed value and not to be compared to post 1990 figures	MN DEPARTMENT of REVENUE, Local Government Services Division
INC83/TOT83: Number, DERIVED, % of Total actually captured 1993, this can be compared with post 1990 figures	MN DEPARTMENT of REVENUE, Local Government Services Division
GROSS83: Number, DERIVED, Gross Tax Increment tax 1983	MN DEPARTMENT of REVENUE, Local Government Services Division
CREDITS83: Number, DERIVED, Adjustment to current year tax by base year tax 1983	MN DEPARTMENT of REVENUE, Local Government Services Division
NET83: Number, DERIVED, Tax Increment Net Tax, actual moneys returned to MCD Tax Increment District 1983	MN DEPARTMENT of REVENUE, Local Government Services Division
AVETAX92: Number, The Average Tax rates are illustrative figures generally used for comparison purposes and are not used to compute actual taxes on an individual property. Data available for cities only.	MN LEAGUE OF CITIES
TAXES_PAY90: Number, Taxes Payable 1990 Real and Personal Property Market Value. The airport & Fort Snelling are combined and reported as FORT SNELLING UNORG and the State Fairgrounds were excluded	MN DEPARTMENT of REVENUE, Local Government Services Division

Center for Urban and Regional Affairs

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