AN ANALYSIS OF THE CONDITIONAL LAND TRANSFER PROGRAM AS A POLICY TOOL FOR ECONOMIC DEVELOPMENT IN MICHIGAN

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By

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ABSTRACT

AN ANALYSIS OF THE CONDITIONAL LAND TRANSFER PROGRAM AS A POLICY TOOL FOR ECONOMIC DEVELOPMENT IN MICHIGAN

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The Conditional Land Transfer Agreement Act, P.A. 425, 1984 (MCLA 124.21-124.29) is a public policy tool designed to promote community economic development and minimize the use of annexation in Michigan. Academic research to evaluate the impact of P.A. 425 on communities executing such contracts had not been conducted. Therefore, the question of whether the Act had accomplished its intended objectives remained unanswered. Data were collected from 26 units of governments that executed P.A. 425 agreements since 1984. The methods used to gather information in the research were mail surveys and phone interviews. Descriptive statistics were used as the main tool of analysis in this research. The results obtained indicate that infrastructure is a precondition for economic development to occur. However, the analysis of the data also indicates that once infrastructure is built, economic development does not necessarily follow.

Dedicated to

My wife Carmen, my daughter Tina, and my son Jon.

For all the inspiration and unconditional support you have provided me through these years to accomplish my academic goals.

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Chapter One: Background

Communities often realize that opportunities for economic development are constrained by the availability of public services such as sewer and water. The characteristic of natural monopolies present in the production and provision of sewer and water gives the producer a strong bargaining position when negotiating the supplying of these services. Consequently, the producer is able to extract premium rents or demand annexation as a condition for access to such services (Harvey, et al, 1997). Historically, townships and villages have systematically opposed the use of annexation or boundary expansion by cities (Pan, 1988).. In Michigan, for example, annexation has been a long-standing problem that has resulted in disputes damaging intergovernmental relationships among local units of government. Furthermore, annexations at times have resulted in long and costly litigation between parties. Annexation[1] was originally devised as a policy instrument to encourage the economic development of communities. From this point of view annexation, as a public policy instrument, failed to perform as originally intended. Indeed, annexation was becoming an increasing source of conflict between cities that under pressure to expand their municipal boundaries and capture tax revenue base, attempted to annex the adjacent land in townships. The presence of conflict situations is explained by the loss of revenues that annexation represents to the governmental unit being attached. Consequently, both cities and townships have developed some strategies to execute annexations and to oppose such actions. For example, many cities have adopted a policy of "no expansion of sewer and water beyond the corporate limits of the city". This policy leaves townships adjacent to cities and in need of these services to

[1] Annexation – a means by which a city expands its geographical borders by capturing nearby property to accommodate urban population growth or o stimulate economic development. Maureen Pan, 1988.

encourage their economic development with no option but to let the annexation procedure to take place (VerBurg, 1996). On the other hand, a strategy based on legal grounds is a tool used by townships to oppose annexation. In Michigan, the State Boundary Commission is the body that either approves or rejects annexation petitions. The State Boundary Commission statute establishes that both units of government must be contiguous for annexation to be approved. There is a documented case in which a detachment of territory from the city and reattachment to the original township broke the contiguity condition between the city and the parcel of land to be annexed (VerBurg, 1996). As a consequence, annexation was not executed. The legal framework of annexation is a source of conflict because it creates winners and losers. In general terms what have been the results of annexation? Further, how have these results affected economic development? Conflicts between units of government scares off potential developers who eventually establish their businesses in areas less subject to conflict. Consequently, both communities involved lose as the benefits and gains from economic growth go to other communities. In addition, townships are denied access to the needed services (i.e. sewer and water, infrastructure), discouraging potential residential, economic and industrial development. Under these circumstances, policy makers in Michigan sought the development of new public policy tools to address the problems associated with annexation. These alternative policy instruments must be characterized by providing a legal framework that would encourage economic development and minimize sources of conflict. In other words, a public policy tool designed to change the performance of the current policy (i.e. annexation) was desired. The "Conditional Land Transfer Agreement Act", P.A. 425 (MCLA 124.21-124.29) was approved by the

legislature of Michigan and signed into law on December 28 of 1984. The act permits the "conditional transfer" of land between two units of government for the purpose of an economic development project. Such transfer of land is usually motivated by the lack of infrastructure capacity and public services needed to promote the economic growth of the communities located on the tract being transferred. The Conditional Land Transfer Agreement Act (commonly referred to as P.A. 425) also represents a more attractive alternative to annexation since it permits the sharing of revenues between the governmental units parties to a contract. According to the statute, the maximum length contracts can be executed is fifty years. It is also possible to renew the agreements for a period of time upon expiration. P.A. 425 also prohibits annexation of the transferred land while the contract is in effect. As a result of the latter characteristic of the Act, not surprisingly it has been used as an instrument of warding off annexations in Michigan (VerBurg, 1992). Since 1984, 130 P.A. 425 contracts have been recorded in the Office of the Great Seal in Michigan. The purpose of the contracts registered varies from the provision of water and sewer services, airport development, economic, industrial and residential development, and fire and police services provision. The increase in the number of agreements in file since the act was passed may indicate that, as more communities become aware of the existence of the P.A. 425 program cities, townships and villages choose the former on the basis of its economic and political advantages over annexation.

Currently, no academic research has been conducted in the state of Michigan by any institution to assess the effectiveness of P.A. 425 legislation. Consequently, the question of whether the act has actually promoted the economic development of

communities in Michigan remains largely unanswered. Harvey claims that some scenarios have been reported in which P.A. 425 seems to achieve its intended goals (Harvey, et al, 1997). He also concludes in his paper that further research needs to be conducted in order to provide a reliable evaluation of such a policy instrument. It is the goal of this research paper to evaluate the effects of P.A. 425 legislation and to suggest a framework for analyzing the economic development of communities as a result of its execution. The guiding question of this research can be summarized as does the Conditional Land Transfer Agreement Act encourage economic development? In other words, has the act achieved its intended purpose? The answer to this question is complex, as there are several problems associated with measuring the effectiveness of any public policy instrument. One of the problems that this research will encounter deals with some other factors that also encourage community economic development, and whose effects cannot be differentiated or separated from the effects of P.A. 425. Harvey states that tax abatements are also used as an instrument to attract industry (Harvey, et al, 1997). Tax abatements are used in conjunction with some P.A. 425 agreements to stimulate the economic development of some regions by attracting industrial development. Some researchers however, claim that the relationship between tax abatements and industry location decisions is not very clear. Marvel (1993) for example, maintains that tax abatements may not significantly influence industry location decisions since tax abatement values often represent a small proportion of the incentive package being offered to a particular firm. Nevertheless, the offering of tax abatements can be seen by firms as an indicator of a community's interest to establishing a long-term relationship with the locating firm and may in the end influence the firm's decision.

Which of these policy tools is responsible for the economic development of the community if multiple tools are employed? The answers to such questions are unclear. Notwithstanding the limitations already specified, the current research is an attempt to evaluate the Conditional Land Transfer Agreement program, its effects and to provide and answer to the question of whether such a public policy tool satisfies the requirements it was designed for in the first place. In order to understand the essence of the Conditional Land Transfer Agreement Act however, some other related topics such as urban sprawl, annexation, economies of scale, economic development, industrial location and the Conditional Land Transfer Agreement Act itself, need to be explored in a more detailed manner.

The Suburban Movement in the United States.

The "American Dream", best described by real estate agencies as a two-story house on a single tract of land in the rural suburbs, and a basketball hoop in the drive way, embodies the predominant urbanizing trend observed in the United States in the last fifty years. Many experts agree that the suburban movement began in the United States in the 19th century. As accurate as this claim may be, however, World War I and World War II are two more recent landmarks in the suburban movement. After World War I, the arrival of the automobile permitted the creation of suburbs that were finally independent of older core cities (Muller, 1981). At the end of World War II, the suburban movement was particularly strong. City dwellers were encouraged to move out the cities by such diverse factors as media advertising, and available tracts of affordable land in the peripheries of core cities (Stroud, 1977). Thomas Muller (1976) argues that the suburban movement resulted from two factors he defined as the "pull" and the "push"

factors. The "pull" factor is linked to people's preferences for low-density neighborhoods, cheap land in the edges of central cities, better transportation systems, and advances in industrial technology. The "push" factor is the increased tax burden imposed on city inhabitants that resulted from less revenue being collected to finance public services. Another key factor that encouraged out-migration was the GI Bill of Rights of 1946, which provided financial incentives such as educational benefits and subsidized mortgage interests to GIs returning from WWII. Racial fears were also considered a driving force, though this factor was not particularly strong until the 1950s (Stroud, 1977). The suburban movement was also distinguished by large masses of both white people, and white-collar workers moving out the cities, leaving behind the less economically affluent sectors of the population (i.e. minorities and immigrants). This pattern of land development, or suburban movement, has resulted in what is defined in the available literature as "current development" or "sprawl growth". The importance of urban sprawl for this research lies on its attributes. Sprawl growth is characterized by being mostly composed of low density, single family residential housing, land consumptive, inefficient, and demanding of additional infrastructure such as sewer and water, among other types of services (SEMCOG, 1997). In conclusion, urban sprawl has resulted in increasing demand for sewer and water, among other community services for residential development.

The Suburban Movement, Infrastructure and Economic Development.

The urban sprawl movement has had important socioeconomic consequences whose effects are still being both discovered and researched. This paper is concerned with three of these many consequences of current development. The first concern is the

issue of "sprawl growth" and infrastructure. The research is interested on the relationship between urban sprawl and the need for additional infrastructure, particularly sewer and water. Does urban sprawl increase the demand for additional sewer and water infrastructure? The importance of establishing a relationship between urban sprawl and increased demand for sewer and water infrastructure lies on the perception that infrastructure development is a prerequisite to achieve economic development. Economic development is an important goal to most societies for it increases the well being of communities and grants economic independence. Rural communities are an example of communities pursuing economic development goals to enhance their residents' quality of life. However, economic development cannot be achieved or sustained without adequate community services (Eftekhari, 1983). The Michigan Society of Planning Officials also supports Eftekhari's assertion in its 1995 Working Paper on "Water, Sewer, and Other Infrastructure Trends" in Michigan. The paper states that "intensive growth and development will follow areas of primary infrastructure investment such as roads, highways, and public sewer and water" (MSPO, 1995). This conclusion highlights the importance of sewer and water services for economic development. The second point this paper addresses thus, is the issue of economic development and sewer and water infrastructure. Is there a relationship between economic development and access to sewer and water infrastructure? The available literature reviewed seems to suggest a general relationship between economic growth and infrastructure, though some authors argue on the nature, direction (or causality), and the results of such relationship. The third important issue refers to economies of scale in the provision of sewer and water services. Public services that use relative large amounts of capital and relative small

amounts of other inputs (i.e. labor) can achieve significant economies of scale over some range of output in both the short and the long run (Cowing, 1976). An economy of scale in the provision of certain public services is often cited as the most important factor encouraging the merger of different units of government or merging selected community services. Indeed, the economy of scale criterion is probably the most important reason that determines planning for sewage facilities because economies of scale allow planners to achieve substantial savings not only on the construction, but also in the operation of these plants (Stroud, 1977). The impact of economies of scale in the provision of sewer and water can be summarized as lower average per unit cost of the service, as more users are hooked up to the central line or pipe (up to physical capacity of the line). Economies of scale are important because they lower the unit price of the service for both residents and industrial consumers. Public infrastructure services such as water and sewer, transport, and electricity are intermediate inputs in the production process. The reduction in per unit cost of any of these intermediate inputs can raise the profitability of production (Kessides, 1993). Similar to any other intermediate input, lower sewer and water cost per unit can be translated into lower production costs for firms, and therefore, more competitive prices. A study done by Pinnoi (1994) in four US regions in 1994 concludes that water and sewer services are a productive factor in the manufacturing process. From this conclusion then, the provision of cheaper water and sewer services not only encourages the economic development of communities but also provides a competitive advantage to manufacturing industry (Kessides, 1993). In this sense, the cost savings associated with the extension of sewer and water lines, as opposed to building a new facility, are translated into lower costs of production to firms and more competitive

products. Nevertheless, distance between the facility and the unit being serviced is an issue that must be considered. Oftentimes, it is more expensive to transport sewage long distances than it is treating it at a local facility. Such fact renders the extension of existing lines an economically unattractive alternative (Stroud, 1977).

The available literature on the subject of economies of size is extensive. Several studies have found economies of scale in the provision of public services. For instance, Eftekhari (1983) makes reference to a study conducted by Lansford in Texas to test for economies of size in the provision of rural community services. Regression analysis was used to determine for economies of scale to be present and the ranges of population over which average and marginal costs were falling, constant, or rising. The report concludes that economies of scale were present in the provision of community services at all levels of governmental units tested (county, municipal, and school services), showing declining average total costs up to a population of a least 25,000 people. A study conducted by Luther Tweeten (1976) also shows economies of size in public services such as police and fire protection, hospitals, public schools, sewerage, and water services. Tweeten's research concluded that scale economies could be realized in water delivery systems if the size of the delivery systems were increased to certain dimensions. On the other hand, Eftekhari's research concludes that diseconomies of scale are present in the provision of sewer and water in rural communities in Mississippi. This is a rather surprising finding since water and sewer services are capital intensive services. The author's hypothesis was that sewer and water services presented increasing expenditures at a decreasing rate, as opposed to increasing returns at an increasing rate.

There are some other economic impacts of sprawl growth that have affected communities across the United States, especially big cities. In Michigan for example, as more people located their residences in the suburbs, manufacturing, shopping centers, restaurants, transportation networks and the needed infrastructure followed (MSPO, 1995). This pattern resulted in economically deprived communities in the cities, and underutilized public services, leading to unused excess capacity and increased costs. On the other hand, the suburbs have thrived with more affluent people moving in, less costly public services and a lower tax burden. In this regard, the city of Detroit is a good example. Detroit's infrastructure was designed to accommodate approximately 2 million people. However, the city's population at present has declined to roughly 1 million people (Wyckoff, 1996). Detroit has registered a population decrease of 821,000 people (44%) in the period 1950-1990 (Wyckoff, 1996). At the same time, neighboring counties such as Oakland and Macomb have increased their populations by 687,591 and 532,439 respectively (MSPO, 1995). How does this increasing population or immigration pattern translate into fiscal impacts? On the city's side the fiscal impacts are decreasing revenue tax bases, lesser funds to finance public infrastructure and increasing tax rates for cities' residents. For the recipient communities additional infrastructure is required to provide adequate services that guarantee a clean environment and the amenities that accompany the better quality of life that attracted people to the community in the first place. Communities that benefited from this immigration have been forced to develop new infrastructure capacity to accommodate such an explosive population growth. However, inadequate infrastructure/services and poor planning have contributed for environmental problems to appear. For example, residents of Shelby Township, Macomb County,

abandoned their underground drinking water supply due to nitrate contamination. The most likely source of these contaminants was failing septic systems in the township (MSPO, 1995).

Current development, along with its distinctive land fragmentation and low-density pattern of growth, impacts the provision of public services. The infrastructure of cities is underutilized as cities' populations continue to decrease. Conversely, population increases in the suburbs lead to a higher demand for public services (MSPO, 1995). The overall result of this situation is unused or excess capacity of public services in the cities (i.e. sewer and water), and new demand for infrastructure and related public services in the suburbs. Demand for infrastructure and related services increases to accommodate residential, commercial and industrial growth. In addition, the availability of infrastructure has an impact on regional economic development. Kessides' report to the World Bank (1993) concludes "infrastructure contributes to economic development not only by increasing productivity but also by providing some amenities that improve the quality of life". Kessides also recognizes that infrastructure services have a structural impact on demand and supply by diversifying the economy. For example, in rural areas infrastructure facilitates the creating of alternative sources of employment and consumption possibilities. She also states that telecommunication infrastructure is a key factor in helping the economy to react and adjust its demand and production in response to changing prices signals.

Infrastructure and industrial Location.

There are some consequences associated with "sprawl growth" not only from the land use/consumption perspectives, but also from the water and sewer provision

perspective. As residential, commercial and industrial development continues to locate in the suburbs, the need for public services such as sewer and water, roads, public buildings and other associated services, also increases. Commercial, residential, and industrial development tends to locate where these services are already available. The Region II Planning Commission, Michigan Department of Transportation, supports this assertion in its 1989 report. This governmental agency conducted research on the infrastructure of Hillsdale, Jackson and Lenawee Counties, Michigan. The results indicate that 14 percent of the local units surveyed believe that inadequate sewage prevented communities from attracting industry. In addition, 13 percent also reported that an inadequate water system actually deterred industry from locating in any community. Absence of adequate sewer and water systems limits the economic development of communities. For example, in Michigan, the Department of Natural Resources has the right to deny new construction permits in an area that lacks sewer and water capacity to accommodate new growth (MSPO, 1995). Does infrastructure, especially sewer and water, affect the location decisions of firms? Though many studies of firm location have been carried out, these studies have largely focused on taxes, ignoring some important infrastructure variables and their effects on economic development (Immergluck, 1993). A study conducted in 1970 in the metropolitan area of Detroit by Charney attempted to identify several factors affecting the location decisions of firms. The results of Charney's study showed that water and sewer availability was an important factor considered by firms before deciding where to locate. Availability of a well-developed infrastructure is often considered as the main advantage industrial regions or large city areas offer to relocating firms. The location decisions of automakers such as Saturn (Tennessee), Mercedes-Benz (Alabama),

and Honda (Ohio) provide an insight about the important role infrastructure plays when firms make location decisions. Suffice to say by now, that infrastructure availability was a major concern for these firms during this decision making process. These examples are explored further in the literature review section of the paper.

From the public policymaker standpoint, a question to study and answer is whether the location of Saturn in the city of Spring Hill, Tennessee, Honda in Ohio, and Mercedes-Benz in Tuscaloosa, Alabama actually promoted the economic development of these regions. Furthermore, did these firms' location decision create jobs, increase the tax revenue base of the local government, further expand the economies of agglomeration in the area, or increase residential development? These are important empirical questions that only new research can answer. The available literature suggests that infrastructure is an important factor firms consider when making location decisions. Areas served by adequate infrastructure usually attract new development. The availability of infrastructure stock permits firms to minimize benefits and maximize profits. Consequently, firms can be more competitive and capture greater market share (Immergluck, 1993). On the consumers' side, buyers also prefer houses that are served by water and sewer systems for they are more reliable, healthier and safer (MSPO, 1995).

The availability of sewer and water services, as well as other infrastructure, are paramount factors that influence the location decisions of firms. However, it must be said that closeness to markets for a particular firm's product, availability of an educated or trained labor force, closeness to raw materials, existence of agglomeration economies, and transportation costs are some other variables that play a role in the location decisions of firms (Marvel, 1993). Needless to say, good quality infrastructure can decrease the

costs of these factors and affect total costs of production. For instance, good educational infrastructure permits for a well-trained work force to be available, decreasing firms' training and searching costs of qualified personnel. Well-developed and maintained highway infrastructure decreases transportation costs for goods can reach their destination much quicker, reducing wages paid to drivers and truck wear.

Annexation, Jurisdictional Boundaries and P.A. 425.

The definition of annexation in the current literature provides an insight as to how the law making process can be manipulated to the benefit of some stakeholders. Banks (1988) supports this assertion in a report he wrote for the Michigan Municipal League in 1989. Banks states that "the personal opinions of property owners influence decisions too easily" in the process of annexation. Even though the definition of annexation highlights the "economic development" of communities as an important goal, such a policy tool is more concerned with providing a solution to the financial problems cities were facing as the suburban movement expanded even further. Annexation is defined as "the means through which a city expands its geographical borders by capturing nearby township property to accommodate urban population growth or to stimulate economic development" (Pan, 1988). It provides the legal setting for central cities to expand their boundaries and appropriate adjacent township property. As an obligation, cities would have to provide public services such as sewer and water, police and fire services to the annexed communities. In general, most townships lack the infrastructure to handle the increasing demand for urban type public services. By allowing central cities to expand and provide the services needed by most suburban communities, policymakers hoped that these communities would attract residential, commercial, and industrial development.

Annexation however, has been long opposed by most townships. Why do townships oppose annexation, even though it would provide services needed to spur economic development? Township officials often state that higher taxes, destruction of the rural character of the land, and loss of independence as the most important reasons against annexation (Pan, 1988). However, at the root of the problem there are two important reasons. The first reason is money, a twofold argument. Small or suburban communities pursue economic development as a means to expand their tax revenue bases, and improve their financial health. When a land area of a township is annexed, property tax revenues assessed on the annexed land go to the city coffers, rather than the township coffers. From the standpoint of a township, annexation means loss of both tax revenues and land. The second reason is a political boundary argument. As the city expands its limits, a more heterogeneous mix of people is obtained. Large minorities in the cities argue that incorporation of these suburban communities actually dilutes their voting strength, thus translating annexation into loss of political power (Muller, et al, 1976).

Another argument often cited by township officials against annexation is that citizens and businesses being attached to the city are not given the opportunity to vote on the issue. This has proven to be an important source of disagreement for annexation results in higher taxes to citizens and businesses in the annexed land to finance increasing wages for municipal employees, and police and fire services costs (Muller, 1976). The passage of the Michigan Charter Township Act in Michigan, which grants legal protection against annexation to charter townships, further complicated this problem. Not surprisingly, the annexation process has been the source of simmering conflicts between different units of government in Michigan (Harvey, et al, 1997). This

conclusion evidences the need for a policy instrument that addresses the problem of tax revenue losses inherent to annexation. Such a tool is the Conditional Land Transfer Agreement Act, or P.A. 425, as it is popularly known.

The Conditional Land Transfer Agreement Act.

The "Conditional Land Transfer Agreement Act" (P.A.425) is a unique policy instrument that permits communities to encourage their economic growth without the traumas and costs associated with the process of annexation. The act originated when the General Motors plant in the city of Flint, Michigan needed to expand its manufacturing operations, but they were constrained due to the lack of suitable land. An adjacent township, Genesee, had an industrial park vacant that suited the needs of GM. The city and the township sat down and negotiated an agreement to transfer the land from the township to the city in exchange for a share of the tax revenue collected. Though an economic recession forced GM to drop its plant expansion plans in Flint, the negotiation of a land transfer agreement was recognized as a landmark process in Michigan. Many Michigan legislators observed the potential of a law permitting the transfer of land could have as a means to spur economic development. They also viewed the land transfer agreement as an alternative to the often bitter process of annexation. Land transfer agreements create an environment of mutual cooperation because both parties to the contract benefit. In other words, it is a "win-win" situation, which markedly contrasts to the "winner takes it all" perception of annexation (Martin, 1988). Harvey states that by changing the structure of the incentives (from annexation to land transfer), the legislation turned the win-lose situation of annexation to a win-win situation (Harvey, et al, 1997). For the city, the benefits of transferring land can be translated into land for industrial

expansion. For the township it means a share of the increased tax revenues collected by the city on the land transferred.

Provisions of P.A. 425 Agreements.

Several provisions of P.A. 425 should be highlighted to assist in clarifying the importance of the land transfer as a policy instrument. An important condition is that there must be an economic development project planned to allow for such a transfer to be executed. The kinds of projects accepted by P.A. 425 could include residential development, industrial park development, and port improvements. The time period by which the property is being transferred from one unit of government to another cannot exceed fifty (50) years. Nevertheless, the act also establishes that the contract can be renewed at the end of the period, provided that both parties agree to an extension. The act also requires local legislative bodies to hold one public hearing before approving the contract. In addition, the contract must be approved by a majority vote of legislative bodies of both contracting parties. The major attraction of P.A. 425 to townships is the sharing of revenues collected according to a mutually agreed formula. This flexible provision negates the often expressed concerns of township officials over the loss of tax revenue. The contract itself is constrained by some provisions (Harvey, et al, 1997). It must have the following components: (1) method by which the contract could be rescinded or terminated before the agreed expiration date, (2) a way of employing, engaging, compensation, transferring, or discharging personnel required for the project, (3) a method of collection, responsibility of charge and rental fees (if any), and method of enforcement, should any of the parts not abide by the agreed terms of the contract, (4) the manner in which purchases shall be made and contracts entered into, (5) statement

specifying whether gifts, grants, assistance funds, or bequests will be accepted, (6) a provision addressing liabilities and insuring against any such liabilities that may be incurred during the contract, (7) any other matter considered important to be in the agreement contract by the involved units. In this last provision, the municipal services being provided are fully identified as a means to reduce any possible conflict in the future.

The approval of a P.A. 425 agreement also conveys some obligations to both contracting parties. The recipient government of the transferred land is obligated to provide the specific public services described in the contract. This same unit of government must pay the agreed share of the taxes in the "sharing revenue provision" to the other party in the agreed manner. Usually, this provision states that the share should be transfer to the recipient unit in no more than a month and half after they have been collected. The residents of the parcel being transferred acquire the responsibilities of any other citizen of the unit they are being transferred to. These obligations apply particularly to taxes, and other payments associated to the provision of some other public services. In addition, residents in the land transfer area are entitled to the full range of benefits, or city services.

There are two successful reported cases in Michigan that illustrate the effectiveness of P.A. 425 in achieving its objectives. The first one is a P.A. 425 agreement between the village of St. Charles and Swan Creek Township; the second one is a P.A. 425 contract between the City of Standish and Lincoln Township. In the first case Thompson Boat, a boat manufacturing firm and the largest employer in the city of St. Charles needed to expand to meet the increased demand for its products. The current

location of Thompson's factory, adjacent to a residential area, made expansion impractical at such location. Swan Creek Township had a parcel of land that could accommodate the expansion of the facility. The township, however, lacked the monetary resources to provide the improvements needed to the site, public services and additional infrastructure. Faced with these problems, local officials of both units of government sat down at the table and worked out an agreement in which 60 acres of land would be transferred to the city of St. Charles. The township would use the tax increment financing to provide the improvements needed for a certified industrial park. In the end, the firm expanded its facilities, the township obtained additional revenues, and both communities benefited from the 200 new jobs created by the expansion. In the second case, economic development of an area south of city of Standish, Lincoln Township was constrained because of the lack of sewer and water services. The State of Michigan owned the parcel and plans had been made to build a prison facility on it. Permitting the city of Standish to annex the aforementioned parcel of land did not pose any problem to the State. On the contrary, it would force the city to provide the needed services for the prison facility. Using annexation as a means to provide the needed services, however, meant that the city would end up getting all the benefits, while Lincoln Township would not share in the additional revenues. The State encouraged the city and the township to work out a P.A. 425 contract. The agreement transferred the land from the township to the city. The contract permitted the township to continue to receive revenues from the transferred land area. To cooperate even further in the economic development of the region, the state extended water and sewer lines to the parcel of land, making these public services available to the community and the prison facility. In the end, both the City of

Standish, and Lincoln Township gained benefits as new jobs were created, public services provided, and economic development fostered (Perlberg, 1990). These are two good examples of successful negotiating processes. Even though there are transaction costs associated with transferring a parcel of land, the parties to the agreement get some tangible benefits as increased tax revenues, and enhanced intergovernmental relations. The benefits derived from P.A. 425 agreements are the opposite from the performance achieved through annexation procedures. Perlberg stresses the point by saying that it is not too hard to agree to a P.A. 425 agreement when the alternative option means that both units would end up worse off (Perlberg, 1990). Some important costs inherent to P.A. 425 agreements are the transaction costs present in any process of negotiating, the loss of community identity, and the loss of sense of community on the parcel transferred. In regard to transaction costs, the provisions of the Act establish that the legislative bodies of both parties must hold a public hearing before a contract can be approved. Furthermore, the contract must be approved by the majority vote of the legislative bodies of the parties to a contract. Sometimes, the costs of reaching a favorable decision with these two provisions in place can be so large as to discourage any unit of government to get involved in a P.A. 425 contract. The land extension or size of the contracting units, and the size and population of the parcel being transferred, seem to be important factors affecting the type of decision made and the time needed to reach such a decision. The identity and sense of community can also be affected when a parcel of land is transferred. Since the transferred parcel depends on the recipient units for taxation, service provision, and other purposes, residents of this land may soon forget their ties to the original communities. The sense of community may be lost when the parcel of land (a small

parcel) is transferred to a bigger unit of government, expanding its boundaries, and having more people in what once was a small community. Many P.A. 425 contracts last up to the maximum length of 50 years. The average length of the 130 P.A. 425 contracts on file is 36.4 years. The length of the contract period raises some important public policy questions. For instance, upon contract expiration, officials dealing with the acceptance or return of the land involved in the agreement will in most cases not be the same group that executed the initial contract. The problem could be even worse when the "conditional transferred" parcel of land gets reverted to the original unit, and no plans about receiving the land were made. Furthermore, once a contract is fulfilled, residents may not want the land in the contract to be reverted to the township or unit of government. In this sense, officials must be aware of this possibility, and its consequences.

The Nature of the Problem

The nature of the problem of annexation is that it ignores certain important issues to the community being annexed. First, the problem of loss of tax revenues and land area linked to annexation. Uncertainties are in place if a community encourages its economic development only to have the growth captured by another community. Second, the only legal tool available to stop any attempts of annexation is appealing to courts. This provision makes annexation processes traumatic, bitter, and costly. Third is the issue of the political costs of annexation, as pointed out by some researchers. Large minorities in the city may feel that their voting power is diminished when different communities are attached to their cities. Therefore, annexation is translated into a more heterogeneous vote, which can be translated into loss of political power. An important question that

needs to be answered about the nature of the problem of annexation is the following: how does P.A. 425 change the aforementioned costs? The provisions of the Act eliminate the costs associated with loss of tax revenues and land by permitting the share of tax revenues, and by prohibiting annexation of the transferred land while agreements are in force. In regard to the political costs via loss of vote homogeneity, it is very likely that P.A. 425 will not eliminate these costs as integration among communities is a dynamic process the necessarily brings about changes in perceptions about political issues and choices.

Policymakers in Michigan needed to find a solution to the problems related to annexation, and come up with a new policy instrument that not only solved these problems, but also encouraged the economic development of communities. The Conditional Land Transfer Agreement Act was their answer to the problem of annexation. P.A. 425 made this possible by altering the structure of the rule, and affecting its performance. The two examples addressed earlier suggest that P.A. 425 does change the structure of the incentives, facilitating the merging of communities and the provision of needed public services for economic development. Currently, no formal research to uncover the effects of P.A. 425 has been conducted in Michigan. This paper is an attempt to reveal those effects, and provide policymakers with an evaluation of such a policy tool.

Chapter Two: Literature Review.

To assess the effectiveness of the "Conditional Land Transfer Agreement Act" as a public policy tool to promote the economic development of communities, the literature available on the subject of public services and its relationship with economic development needs to be reviewed. Other crucial subject for the purposes of this research is the relationship between firms' location decisions and public services availability (i.e. does the availability of these services affects location decisions of firms?). A third important topic to be reviewed is the presence of economies of scale or size in the provision of public services such as sewer and water. Economies of size in public services provision can affect firms' decisions about pricing of final products. All these topics are important for the purposes of this paper, as previous research may have established a link between infrastructure and community economic development.

Infrastructure as a Factor of Production and Economic Development.

Public capital can affect economic activity by several means. Public capital can enter the production process of a firm as an unpaid factor, affecting both firms' output and productivity (Eberts, 1986). Infrastructure can enter production processes either as an unpriced or priced factor of production or input. Infrastructure such as streets, bridges, and highways are usually unpriced unless of course, tolls are imposed. On the other hand, sewer and water services are usually priced inputs. Public infrastructure is used as a factor of production at lower costs than any other substitute because of the characteristic of "publicness" of infrastructure services (Immergluck, 1993). Therefore, adequate infrastructure enables firms to maximize profits and minimize costs, and be more competitive in the market place. Conversely, absence of infrastructure can have

detrimental effects on economic activity. Ronald Moomaw (1995) claims that units of government must compete among themselves to attract private investment. Inadequate road infrastructure capacity that leads to more traffic congestion, and saturated or unavailable sewer and water systems impose real economic costs on firms, resulting in a lower ability to compete against other firms located in better served areas. Frequent road congestion increases total costs by raising shipping costs of goods and fuel consumption. The unavailability or restrictions on sewer and water connections may also increase firms' production costs, as these inputs would have to be purchased at higher prices from other suppliers. Public capital can also influence the location decisions of households and firms and increase the agglomeration economies of a particular region.

Randall W. Eberts (1986) research on the subject of infrastructure and economic development pinpoints a relationship between these two variables. Ebert's research estimated components of public capital stock for 38 metropolitan areas in the United States using the perpetual inventory model. The model considers public capital as input into a translog production function. The estimates of marginal productivities, returns to scale, and elasticities in the model provide information about the effect of public capital on output and the technical relationship between inputs. In the end, Ebert concludes that public capital stock contributes significantly to manufacturing output in the sampled 38 metropolitan areas. Second, the contribution of public capital is much less than the contribution to output done by private capital and labor. The contribution of public capital to output was not adjusted in this research to reflect the characteristics of "publicness" of public capital. Third, public capital and labor are complementary inputs. Private capital and public capital, and private capital and labor, are substitutes. Ebert also

claims that public capital is a condition for future expansion in manufacturing firms. This conclusion is supported by the finding that infrastructure and manufacturing employment are complementary inputs in the production function of the regions under investigation. Ebert concludes his research asserting that the economic growth of the regions is affected by the growth rate of public capital.

A study conducted by Biehl (1991) in several country members of the European Community explores the relationship between infrastructure and economic development as well. The method used by Biehl is the regional development potential approach (RDPA). In this approach income, productivity, and employment levels of regions are considered indicators of regional development. Biehl argues that infrastructure, along with other factors such as location, agglomeration economies, and sectoral structure are the main factors that determine the potential for development of a particular region. Biehl defines these factors as follows. Location refers to the closeness of a region relative to the centers of economic development. Agglomeration refers to the spatial concentration of population, producers, and consumers in a particular area. It affects development for more agglomerated regions present lower transportation and communication costs, and therefore are more attractive to industrial facilities and manufacturing firms. However, an optimal degree of agglomeration is needed for these gains to be achieved. After this optimal point or degree has been exceeded agglomeration economies can actually increase total costs. Total costs are increased by negative external costs such as pollution, time losses, and stress. Sectoral structure captures the relationship between the size of agricultural, industry, and service sectors and the level of development of the region in terms of income per capita, employment, and productivity. The underlying

argument is that low income regions typically present a higher share of agriculture in their economic structure, whereas high income regions have declining ratios of agriculture and industry (or constant), and increasing service sector ratios.

Biehl's main argument is that regions endowed with a well-developed infrastructure capacity increase the productivity of private investment and reduces private costs. Industry and firms located within these well-endowed regions have a competitive advantage over industry established on less endowed areas. Such an advantage shows up in higher regional GDP per capita, and higher employment levels. From this standpoint, productivity, income, and employment are an increasing function of the infrastructure endowment of a region. In his research Biehl uses a quasi production function (QPF) where infrastructure, location, agglomeration, and sectoral structure are considered exogenous variables and the dependent variable is represented by one development indicator (i.e. income). The general form of the QPF is specified as follows RDP = f (I, L, A, S), where RDP is defined as the regional development potential of the region, I is infrastructure, L is location, A is agglomeration, and S is sectoral structure. In this research the concept of infrastructure is expanded to include such categories as environmental infrastructure (sewage, water, waste composting, incinerating), health, social, and cultural infrastructure. Not surprisingly, the results of the study show that the majority of the regions fell into either the "over-utilization" or "under-utilization" of infrastructure category despite the QPF used. Nevertheless, the important finding of Biehl's research is that all the highly developed, agglomerated and well-developed infrastructure regions were classified under the "over-utilization" category. Less developed and less well infrastructure endowed regions fell all into the "under-

utilization" category. Biehl claims that such a finding supports his hypothesis that better infrastructure endowment of regions increases their productivity potential. As a result, these regions are more attractive to firms and labor. Randall Eberts (1988) refers to a study conducted by Mera, which also reached a similar conclusion on the effect of public infrastructure on regional economic growth for the United States. Mera examined the patterns of economic development of the nine US census regions in the period from 1947 and 1963. He concluded that more-developed regions were growing as a result of public infrastructure growth. Less developed regions, on the other hand, were growing because of technological growth.

The Michigan Society of Planning Officials' working paper entitled "Water, Sewer and other Infrastructure Trends" published in 1995 also highlights the importance of the role of infrastructure in economic development. The paper concludes that the economic prosperity of regions relies upon the provision of a solid infrastructure capacity that can handle the increasing demand for public services associated with economic development (MSPO, 1995). The report also states that land use heavily depends on the capacity of infrastructure systems to accommodate new growth. The relationship is such that if infrastructure systems cannot handle additional growth or development, the systems become inefficient. As infrastructure systems become increasingly inefficient, the more expensive they become in terms of lost time, wages paid to workers to repair failed systems, and resources used. New development will often try to locate in places that already have infrastructure capacity to satisfy its demand for public services. New development also will locate where these inefficiencies are absent, or minimized.

Available efficient infrastructure will often attract new development for it provides the needed services, and resources are available at known costs (MPSO, 1995).

An infrastructure study conducted by Bergman and Sun (1996) for North Carolina counties also shows interesting results. It must be pointed out first that the state of North Carolina "has traditionally" depended on infrastructure development to encourage economic growth. In the research infrastructure components are entered as co-production factors in a Cobb-Douglas type production function. Bergman and Sun specified the model as follows:

$$\text{Log}(Y/L)= \beta_0 + (\beta_1+\beta_2+1)\text{log}L + \beta_2\text{log}(K/L) + \Sigma\alpha_i\text{log}X_i$$

Where Y, L, and K are output, labor and capital respectively. X_i is the ith infrastructure component, and α's and β's represent the elasticities of the indicated factors within the respective parenthesis. These parameters indicate the percentage change in productivity due to a one percent change in infrastructure investment. The results of the model indicate that a higher productivity is observed in the most urbanized counties. The coefficient of manufacturing productivity showed that one percent increase in capital per worker, increases output per capita by 0.34 percent. An important finding of Bergman and Sun study is that sewer and water capacity did not show any significant effects on productivity. Bergman and Sun concluded their research stating that overall average labor productivity in the most highly urbanized counties is higher. This conclusion also highlights the important role that agglomeration economies play in the economic development of communities. The issue of agglomeration economies is discussed in more detail in the review of firm location decisions and infrastructure. Infrastructure availability acts as an incentive to firms to locate in determined areas.

Alice H. Munnell (1992) asserts that public infrastructure enables private firms to produce their products at lower total costs. Consequently, the impact of infrastructure on private sector output and productivity can be considered large. In her study, Munnell analyzed the relationship between public infrastructure and economic performance in the 48 contiguous states in United States and identified three important factors. First, the production function used in her model showed a significant positive impact of public capital on output. The output elasticity of public capital in the model was 0.15. Such elasticity coefficient indicates that one percent increase in investment in public capital, increases regional output by 0.15 percent. The second finding Munnell reported refers to whether public capital "crowded out" private capital investment or not. According to her results, public capital investment actually stimulated private investment. Third, Munnell found a positive and significant relationship between public investment and employment growth. She concludes that her results indicate that output, investment, and employment growth show a positive relationship with public capital investment.

Ronald L. Moomaw, John K. Mullen, and Martin Williams (1995) analyzed state estimates of the impact of public capital on regional output using a translog production function. Labor, private and public capital are entered in the production function as separate inputs to "avoid the bias inherent in a Cobb-Douglas specification". The data set used corresponds to data on the already specified variables for the years 1970, 1980, and 1986. Highways, water and sewer systems, and other types of public capital are entered as separate inputs in the production model so that their individual roles in determining regional output can be observed. The results of Moomaw's research indicate that aggregate public capital (i.e. highways and water and sewer systems) positively affect

states' output. The output elasticities of water and sewer systems ranged from 0.0003 (Vermont) to 0.23 (Pennsylvania). In the Great Lakes region, four of the twelve states (Ohio, Indiana, Illinois, and Michigan) recorded larger output elasticity coefficients than those found by Munnell's research. In Michigan, such coefficients were 0.1865 in 1970, 0.1312 in 1980, and 0.2261 in 1986. The researchers conclude that water and sewer systems have a larger impact on output than highways and other public infrastructure. In this regard, policies aimed to encourage the economic development of the Great Lakes region may offer better results if investment is devoted to upgrade or construct sewer and water facilities rather than highways. The authors also stress the point that due to regional variations in these coefficients of output elasticities, public policies intended to promote regional economic development should take into account the impact of each type of public capital on output.

The literature reviewed so far has documented only cases or studies conducted in the United States and developed countries. The next portion of the review will address some research conducted in some developing countries. The main sources for this review are the 1993 World Bank Discussion Paper entitled "The Contributions of Infrastructure to Economic Development" by Christine Kessides and "Infrastructure Development for Economic Growth" edited by M.V Srinivasa Gowda and Susheela Subrahmanya.

In her 1993 report to the World Bank Kessides makes reference to some landmark previous work on the topic of infrastructure and economic development. For example, Kessides refers to a study conducted by Easterly and Rebelo in which both historical time series and cross-country data on 28 developed countries is assembled to determine the relationship between public capital investment and GDP. The authors'

findings show a strong positive correlation between transport and communication investment and growth. A study carried out by Binswanger in India is also referenced by Kessides. In this study, Binswanger analyzed cross-country time data in 1987 and cross-district data in 1989 in India to determine the effects of roads on agricultural output. The results of the study indicated that roads have a strong positive effect on aggregate agricultural output. Furthermore, availability of electricity/power also seems to affect the decisions of firms and households regarding farm investment. Srinivasa (1997) affirms that infrastructure plays several roles in the economic development of communities because it is essential for households, firms and governments to function. In addition, he argues that success in economic activity depends upon the adequacy of infrastructure to support such success. Srinivasa says that the 1994 World Bank Development Report reveals a positive link between infrastructure and economic development, measured as changes in the level of GDP. In the report, the World Bank study shows that a one percent increase in the stock of infrastructure yields a one percent increase in GDP across all countries. In addition, the provision of public infrastructure helps to protect the environment. Environmental infrastructure such as clean water, sewer, solid waste disposal, and management of traffic in urban areas, among others, provides environmental benefits to society as a whole. Environmental infrastructure leads to cleaner air and water, factors that in turn lead to a healthier and more productive population. This argument is supported by Kessides (1993) in her report to the World Bank as well. She affirms that inadequate infrastructure can affect individuals' health, labor productivity, and quality of life. Water sanitation is a major field in which the effects of adequate infrastructure can be observed. As safer water is provided, morbidity,

child mortality and risks of getting sick by water-borne diseases such as diarrhea are decreased. It is important to mention that in order to accomplish these goals of improving people's quality of life, it is necessary not only to have adequate infrastructure to deliver safe drinking water, but also adequate water sanitation facilities. Water sanitation infrastructure makes the water safe for human consumption and renders wastewater less harmful by treating it before release into natural ecosystems. Another study cited by Kessides that is that conducted by Devarajan, Swaroop, and Zou in 1993. This research however, reached opposite conclusions to those obtained by Kessides, and the authors previously referenced. The study was conducted in 69 developing countries and looked at GDP growth and investment in transportation and communications in a 20-year period. The authors of this study found a negative and statistically significant relationship between investment in transportation and communications and GDP growth.

Most of the previously referenced studies pinpoint a strong positive relationship between infrastructure and economic development. The provision of adequate infrastructure encourages the economic development of communities for public infrastructure has a positive effect on output, affects the location decisions of firms, and therefore employment. Firms are attracted to areas already being served by public services because adequate infrastructure (i.e. water and sewer) is used as input in the production process and allows firms to maximize profits and minimize costs. The work of Ebert Randall, Biehl, and Mera, among others, highlighted the linkage between infrastructure and economic development.

Infrastructure and Firm Location Decisions.

The previous section contained mostly research that establishes a link between infrastructure and economic development. The goal of this section is to demonstrate that infrastructure availability plays an important role in the location decision of firms. The hypothesis guiding this segment can be stated as "municipalities with well-developed infrastructure are more attractive locations to different types of firms than are areas with less developed infrastructure". In this regard, some research conducted in the United States is reviewed next so that the link between infrastructure and location decisions of firms is unveiled.

A study conducted by Alberta Charney (1983) on the effect of local taxes as a factor affecting the location decisions of firms in the three county metropolitan area of Detroit between 1970-1975 is a milestone research. The research's model is built on the assumption that firms are profit maximizers and therefore firms' location decisions are directed towards finding sites that permits firms to maximize total revenues over total costs. Charney's research also investigates on the relationship between infrastructure and firms' location decisions. The model used by Charney states that manufacturing firms require, among other inputs to their production process, public services such as water and sewer. She also claims that the availability of water and sanitation services is a very important consideration in the selection of a determined site by many industries. In Charney's investigation, the dependent variable is defined as the ratio of locating firms to land area in the jurisdiction being researched. In addition, proximity to highways and sewer and water are also included as independent variables. The proportion of all land served by sewer and water trunk lines defines the sewer and water independent variable.

Immergluck (1993) affirms that sewer and water trunk lines can not be considered equivalent to sewer and water net asset value. However, he agrees on that "it seems to be a reasonable variable" that can capture the net value of these assets for the purposes of Charney's study. The findings of the study are as follows. The water and sewer coefficient and t-test results in the model's regression show a positive and significant relationship at the one percent level of significance of this variable. For all firms, an increase of one percent in the ratio of sewer and water acres to total land results in a 0.476 percent increase in the ratio of relocating firms to total land. The variable closeness to highways shows a significant and surprisingly inverse relationship with the dependent variable. Proximity to highways is significant in this study at the 10 percent level of significance. Charney gives no explanation for this finding. The property tax rate variable shows an inverse relationship with the ratio of firm relocation. The t-test indicates significance at the one percent level and the coefficient indicates a decrease in 2.45 percent of firms relocating in the area due to a one percent increase in property taxes. High property tax levels in a community represent a disincentive to relocating firms. Such a disincentive increases as firms' size also increases. The explanation given by Charney of this finding is that property taxes represent a fixed cost to firms. In other words, firms have to pay such a tax regardless of whether they are making sufficient income to show a fair return. Consequently, property taxes take a larger share of a firm's gross revenues in bad times than in good times.

There are two reasons why the results of the study conducted by Charney are important for the purposes of this research. First, Charney's study establishes an empirical link between industrial location and public services availability, specifically

sewer and water and highways. Furthermore, it is demonstrated that the availability of sewer and water services is considered an important factor by firms when making decisions about where to locate. The second aspect of Charney's research important to mention is the inverse and significant relationship found between the property taxes and firms' location decision variables. In this regard, communities seeking to encourage their economic development but in need of expanding public infrastructure have to be aware of the negative effects that increasing property taxes may have on industry relocation decisions. Funding of infrastructure improvements entirely on property taxes may increase the tax burden on existent firms within a particular jurisdiction and scare off incoming businesses who may have considered the community an attractive location to establish. In the end, the community may be left with a large bill for infrastructure improvements made and a decreasing tax base due to an increase in the number of outmigrating firms.

A study conducted by Erickson and Wasylenko (1980) in the city of Milwaukee also shows a relationship between infrastructure and industrial location. Erickson and Wasylenko assume that firms are rational economic agents and tend to maximize profits. They also brake down firms in two categories: manufacturing and retail and services firms. Erickson and Wasylenko made such categorization based on the assumption that relocation decisions of manufacturing firms do not affect sales. Therefore, these firms' objective is always to minimize costs of production. Retail and services firms' costs and sales on the other hand, are affected by relocation decisions of firms. These firms always tend to maximize profits. The dependent variable of both models is specified as each firm's demand for land in one of the investigated 56 suburban cities and villages in the

Milwaukee SMSA. The independent variables included in the cost minimization model (manufacturing firms) are the price of land, taxes, public services, and agglomeration economies. For the profit maximization model (retail sales and services firms) the variables included are population density and per capita income. The expenditures of municipalities on safety (police and fire protection services) and services (streets and sanitation) measure the public services variable in the former model. The results of Erickson and Wasylenko research indicate that more than 50 percent of the variation in the dependent variable is explained by each equation. Erickson and Wasylenko's research reaches some conclusions. First, agglomeration economies and availability of labor are important factors attracting all industry sectors to any locality. Construction, wholesale trade, and to some extent transportation, retail trade, finance, and services firms tend to relocate in sites farther from the Central Business District (CBD). Manufacturing firms, on the contrary, relocate near highways. Second, Erickson and Wasylenko find that taxes do not affect significantly firm's location decisions. This result is opposite to Charney's findings in her research, where she determines taxes to be an important factor influencing the location decisions of firms. Charney claims that her research avoids what she considers an empirical problem (insignificant taxes variable in firms' relocation decisions) encountered by Erickson and Wasylensko's by dividing the number of locating firms in a determined area by the land area of the jurisdiction (Charney, 1983).

Pascal and McCall, in their paper entitled "Agglomeration Economies, Search Costs, and Industrial Location" (1980) also address the argument developed by Erickson and Wasylenko that agglomeration economies influence the location decisions of firms.

Like Erickson's paper, they argue that firms (especially young firms) locate where total costs can be minimized. This is accomplished by locating where other prosperous firms are already established. To explain such a behavior, Pascal and McCall argue that new firms making location decisions face uncertainty about their own production function, location of potential suppliers and workers, and customers. These factors are not clear at the beginning for firms, rather they are known as firms engage in businesses and learn by doing. The learn-by-doing process imposes some costs on firms. By following other successful firms located in a determined area, newer firms diminish the costs of assembling supplies and workers at an almost infinite number of possible locations. In summary, newer or younger firms have an economic incentive to locate where other successful firms have already established, or agglomeration economies have been realized. The economic incentive is represented by total costs diminished due to lower costs of supplies, transport and information costs among other types.

General Motor's Saturn division is an extraordinary good example of how sewer and water availability influences industrial location. In January of 1984, GM announced its plans to invest $ 3.5 billion in its newest division. After specifying how its factory would promote economic development in the selected region (i.e. income and employment created), GM also announced its conditions to build the factory in any locality. The conditions established as "must meet conditions" the availability or supply of four million gallons of water per day and a sewer system capable of handling 2 ½ to 3 million gallons of discharge per day (Harrington, et al, 1995). After approximately 1,000 proposals submitted to GM by municipalities across the country, the firm located its plant in the city of Spring Hill, Tennessee, and distant just 35 miles from the Nissan factory in

Smyrna. The winning location, besides complying with the water and sewer requirements, also offered both closeness to interstate highways and the advantage of "economies of agglomeration" (Harrington, et al, 1995). The term "economies of agglomeration" refers to other related industry already located in the area. For example, Silicon Valley, California (electronics) and the city of Dearborn, Detroit (automobiles), present economies of agglomeration. In Detroit, it is observed by the large number of auto related firms (auto parts, tires, steering wheels, etc.) that have established and flourished in the region. Agglomeration economies is one of the main important factors that determine the development potential of a region (Biehl, 1991). Economies of agglomeration permit the reduction of firms' production costs though lower transportation costs because of factory closeness. The consequences of such costs savings are also translated into more competitive prices in local, as well as international, markets. The importance of water and sewer availability for economic development is also stressed by a study conducted in the United States claiming that 80 percent of US communities cannot promote economic growth due to limitations in wastewater capacity (Bamberger, et al, 1985).

The location of Honda in Marysville, Ohio is another example of how infrastructure and other economic incentives attract industry to certain areas. Marvel reports that variables such as market location, good transportation systems, supply of labor and parts, and industrial environment encouraged Honda to locate in Marysville. The state of Ohio also offered an attractive incentive package to the automaker. The package included $8 millions in upgrading local sewer and water facilities, $1.7 millions in one-time site improvements, $35 millions in improvements to highways, and partial

property tax abatements. Marvel concludes that the direct economic benefits of the plant exceed the investment local and state government made at the initial stages of the project.

The decision of the world famous automaker Mercedes-Benz to locate in Tuscaloosa, Alabama also pinpoints the importance of infrastructure to firms when making location decisions. Camp (1994) claims that some factors that influenced the final decision made by Mercedes were the good quality infrastructure provided by the selected community, its quality of life, availability of a qualified work force, and some other requirements that met the needs of Mercedes. The presence of agglomeration economies via a strong network of automobile parts suppliers was also an important factor considered. The last assertion highlights the importance of agglomeration economies to firms when deciding the best place to locate their businesses. The author also remarks the economics benefits to local communities brought about by Mercedes' decision, $7.3 billion for state and local governments as a result of the 1,500 jobs created directly by the automaker and 13,500 jobs in supporting industries over a period of twenty years.

The previous section of the paper reviewed some literature related to infrastructure and firms' location decisions. The findings of authors such as Alberta Charney, Erickson, Wasylenko, Pascal and McCall, Harrington, Marvel, and Camp suggest that infrastructure availability is an important variable affecting the location decisions of firms.

Economies of Size in Infrastructure and Economic Development

The presence of economies of scale in the provision of infrastructure is an important topic that needs revision too. In increasing returns to scale output increases in

greater proportion than input use (Browning, et al, 1996). There are some factors that lead to increasing returns to scale. First, specialization of tasks or jobs allows workers to perform more proficiently their work and increase the amount of output produced by a firm. A second source of economies of size is arithmetical relationships. In this regard, the circumference of a pipeline (and the amount of material needed to create a unit of pipeline) is defined to be equal to the constant (π) multiplied by twice the radius of the pipeline. If the radius of the pipeline gets increased from one to ten feet, the pipeline's circumference is likely to increase by a factor of ten (and corresponding construction costs), but its carrying capacity is increased by a factor of a hundred (Browning, et al, 1996). In conclusion, increasing returns to scale imply that average unit costs are falling ($AC = TC/Q$). What is the importance of increasing returns to scale in the provision of infrastructure and some public services such as water and sewer? Increasing returns to scale lower the average cost of providing infrastructure capacity in some public services. In the previous section, it was pointed out that some infrastructure, especially sewer and water, enters the production function of firms as paid factors of production. The providing of these services at lower average cost per unit is likely to translate into lower production costs for firms allowing them to be more competitive in the market place. Nevertheless, economies of size in the provision of some public services (i.e. water) are limited by the density of population in the area to be served (Tweeten, 1976).

A study conducted by Tweeten and Brinkman (1976) on individual services show economies of size for police protection, air pollution control, fire protection, sewerage, and water services. In their study Tweeten and Brinkman claim that a 60 percent cost reduction per million gallons per day (mgd) is possible if the size of water delivery

systems is increased from 5 mgd to 50 mgd. In addition, 50 percent savings can be realized in water transmission by increasing the size from 1mgd to 2 mgd. The authors also make references to a research conducted in 1972 that studied 57 water systems funded by the Farmer's Home Administration (FmHA). The study concluded that distribution systems investment cost per customer declined from $1,041 for water delivery systems with 4.1 customers per mile (average) to $539 for systems averaging 30.5 customer per mile. Tweeten and Brinkman also claim that the role of infrastructure in encouraging economic development is not very clear. Furthermore, they say that industrial managers, when rating the importance of location factors, usually rank public services below nearness to markets, availability of inputs, agglomeration economies, and transportation. Though their conclusion downplays the importance of infrastructure as a key a factor in the economic development of communities, it also highlights the importance of agglomeration economies in firms' location decisions. Furthermore, researchers such as Biehl claim that agglomeration economies are a result of availability of infrastructure, which makes locations more attractive to industry and firms.

A study conducted by Eftekhari (1983) tested for economies of size in the provision of community services in rural Mississippi. Though Eftekhari's research comprises a wide range of public services, this paper is particularly concerned with the author's methods and results related to sewer and water services. The data used by Eftekhari to build his model of water and sewer costs by city size was for the 1980 fiscal year and obtained from the Department of Audit in Jackson, Mississippi. The data set contained 261 observations on expenditures in sewer and water from many communities in the selected area. Eftekhari hypothesized that a growing population and rising incomes

imposes greater demands on water utilities. The general model used by the author to test his hypothesis is specified as follows:

$LnTO_{ws} = a + bLnX + u_i$.

Where:

TO_{ws} = total operating expenditures on water and sewer services;

X = population size;

a and b = parameters to be estimated;

u_i = disturbance term;

Based on this general model, Eftekhari tried several different functional forms for his analysis. He claims that both the linear and quadratic models did not behave as expected, though he does not explain the reasons for the failure either. Consequently, the general model was changed and a log-transformation of the observations was made. This resulted in a higher coefficient of determination for this model. The resulting equation of these manipulations is $TO_{ws} = e^{0.013} X^{1.004}$. In this model the coefficient of the log x is interpreted as the estimate of elasticity. The obtained coefficient of 1.004 indicates that for every one percent increase in population, there is a 1.004 percent increase in water and sewer expenditures. Eftekhari's findings indicate that there is no presence of economies of size in the provision of water and sewer services in rural Mississippi. He concludes that the expectations of the study were to find increasing expenditures at a decreasing rate (that would pinpoint the presence of economies of scale), rather than increasing expenditures at an increasing rate. The reasons for such expectations lie on the fact that sewer and water services are capital intensive services. Consequently, overhead costs are spread over more units of output produced, and lower average cost per

unit can be realized. Eftekhari does not offer a possible explanation as to why this is the case in rural Mississippi.

To the extent that economies of size are present in the provision of infrastructure, lower average cost per unit of the service provided is expected. Firms behaving rationally are fully aware that any reduction in the cost of these inputs to the production process is translated into lower production costs, which in turn leads to more competitive prices and higher profits.

This section of the paper reviewed the literature available on the subject of public capital as a factor of production and its contribution to the economic development of communities. Infrastructure enters the production function of firms either as an unpaid or paid factor of production. The absence or lack of adequate infrastructure was shown to increase the costs of production of firms. The chapter also explored the relationship between infrastructure and the location decisions of firms and households. The literature consulted indicated that infrastructure's quality and availability was an important factor to be considered by firms when making location decisions. Bielh argued that regions with well-developed infrastructure have an advantage over other less well endowed areas. In this regard, the presence of agglomeration economies in a particular region serves as an attraction pole to relocating firms. The incentive to relocate where agglomeration economies are present is economic in nature. Closeness to suppliers, and availability of a trained labor force are only two of the factors that permit firms to minimize their costs of production, thus maximizing profits. Agglomeration economies can also increase firms' production costs. Frequent traffic jams, failing sewer and water systems and power outages due to overburden infrastructure capacity impose a financial burden on firms. In

the specific case of traffic jams, total costs can increase due to higher wages paid to truck drivers, as well as higher tear and wear rates of truck's components such as tires, and brakes. The presence of economies of size in the provision of public services was also an important issue examined in the literature review section of the paper. Studies conducted in the United States showed that scale economies in the provision of public services such as sewer and water could be realized. The presence of economies of size in public services allows for the average cost per unit to decrease, as more units of the service are produced. Rational behaving firms realize that lower average cost per unit of service represents a reduction in the costs of these inputs (i.e. paid infrastructure such as sewer and water) and therefore lower total costs.

The objective of Michigan's Conditional Land Transfer Agreement Act (MCLA 124.21-124.29) is to promote community economic development in a broad spectrum. P.A. 425 was also designed as an alternative policy instrument to municipal annexation, which was becoming a common source of conflict between townships and cities in Michigan. The Act recognizes that a principal problem of annexation is the loss of property tax revenues to the party being annexed. A key provision of P.A. 425 permits the sharing of revenues between the parties to a contract, thus minimizing the problem of revenue losses associated with annexation. The Conditional Land Transfer Agreement Act recognizes two important issues as well. The first issue is that community economic development is dependent upon infrastructure. In order to initiate or accelerate the economic development of communities, infrastructure needs to be provided. Second, it recognizes that public services such as sewer and water, police and fire protection, and other municipal services can achieve economies of scale. The fact that these services can

be provided reliably and at lower cost attracts firms and people. In addition, environmental infrastructure also affects people and businesses location decisions as a cleaner and safer environment is usually associated with a better quality of life. The Conditional Land Transfer Agreement Act makes available the provision of public infrastructure without the inherent problems of annexation. Infrastructure availability encourages community economic development. In this chapter, it was argued that infrastructure investment encourages the economic development of communities by several means. First, infrastructure is used in the production process as either an unpaid or paid factor of production, affecting firms' output and productivity. Consequently, adequate infrastructure permits firms to maximize profits and minimize costs. Second, infrastructure has been found to be a factor affecting both the location decisions of firms, and the level of employment of the communities where firms decide to locate. Research conducted in the United States have shown that availability of infrastructure such as sewer and water, electricity, and highways, allow firms to minimize production costs as well. For example, well-developed and maintained roads and highway networks permit firms to transport their products in less time (by decreasing costs of drivers' wages) from factories to distributors or resellers. As a result, firms have incentives to locate at places where these types of infrastructure are available so that production costs are minimized. The location decisions of automakers such as General Motors' Saturn, Mercedes, and Honda are examples of the importance of infrastructure to firms before deciding where to locate factories, production lines, or plants. Third, infrastructure provision can achieve economies of scale. To the extent that economies of scale are realized, average costs per unit of public services decrease as more users are added to the service. From the firms'

standpoint, lower costs of inputs can be translated into lower costs of production, and therefore larger profits.

The Conditional Land Transfer Agreement Act is a public policy tool with the potential to encourage the economic development of communities by providing public infrastructure without the threats and problems of annexation, and at lower average costs per unit of service provided. Lower costs of production can be translated into more competitive products. Available infrastructure also acts as an incentive for firms to relocate where these services are available, encouraging the development of "agglomeration economies" in the area being serviced. The benefits of "agglomeration economies" not only are to be enjoyed by producing firms, but also by local economies and units of government which can increase their revenues. However, care must be taken as the capacity of public services is not to be exceeded for the quality of services being provided can be affected negatively. Real economic costs can also be impose on firms due to unreliable infrastructure or services that can disrupt production processes.

Chapter Three: Research Methodology.

Chapters 1 and 2 presented both the background and the literature review on the paper. The literature reviewed referred to previous research conducted in both the United States and other countries unveiling the relationship between infrastructure and community economic development. The present chapter describes the methodology used in this research to investigate the role that Michigan's Conditional Land Transfer Agreement Act (MCLA 124.21-124.29) has played in the economic development of communities located on parcels of land transferred under the provisions of Act since 1984.

The objective of the paper

The objective of the paper is to evaluate the effects P.A. 425 legislation has had on the economic development of communities located on parcels of land transferred according to the provisions established by such a statute. The research will focus on the 130 registered agreements that have been executed in the State of Michigan since the Act was enacted in 1984. In order to accomplish such objective, data on economic growth indicators pinpointing any economic development changes in these communities needs to be generated. The final goal is to draw conclusions from the collected data to answer the question of whether such economic growth resulted from the execution of P.A. 425 agreements. The hypothesis to be tested is specified next.

Hypothesis

The Conditional Land Transfer Agreement Act encourages the economic development of the communities located on parcels of land transferred under the provisions of the Act.

Sample Size and Sampling Procedures

The sample size for the research is set at 20 contracts executed and registered with the Office of the Great Seal of the State of Michigan between 1985 and 1997. The universe from which the sample is being drawn is composed of 130 registered contracts as of October of 1997.

The method used to select the sample units for this research is stratified non-random sampling procedures. Stratified non-random sampling is used due to the advantages such technique offers. Stratified sampling is a technique used when certain specific units need to be included in the sample, resulting in a reduction of the overall sample variability. This sampling procedure also increases the precision of statistical estimates by maximizing the variability between strata and minimizing the variability within strata. On the other hand, the use of random sampling procedures in this research would have given an equal probability to each of the registered contracts to be picked out. Nevertheless, due to the small number of both contracts rescinded and contracts completed in the universe of agreements available, using random sampling would have resulted in a small number of these contracts being selected. As a result, these two types of contracts would have been misrepresented in the sample. To minimize this possibility, all registered contracts were classified in three different groups: "contracts rescinded"," contracts completed", and "contracts in force for more than four years".

As of October of 1997, six P.A. 425 agreements had been rescinded and reported to the Office of the Great Seal of the State of Michigan. The Conditional Land Transfer Agreement Act (MCLA 124.21-124.29) was originally designed as a legislation that would provide economic gains to both parties to P.A. 425 agreements (i.e. a "win-win"

situation for both municipalities) while accelerating the economic development of the communities on the parcel transferred. As a consequence of these advantages, local governments seeking to accelerate community economic growth had incentives to execute P.A. 425 contracts under the provisions or terms of the law. From this standpoint, the structure of the Act provided no incentive to revoke any P.A. 425 agreement before completion. The evidence indicated that there were reasons for some units of government to rescind P.A. 425 agreements. A question that arises in the mind of any policymaker is why these governmental units rescinded the contracts. What were the reasons that prompted these municipalities to make such a decision? Getting to know the reasons municipalities had to revoke these P.A. 425 contracts could be instructive to policymakers. Data gathered from the units surveyed have the potential to provide information on possible aspects of the law that need to be corrected or changed. To conclude, the objective of including the rescinded contracts in the sample is to elicit information explaining the rationale for municipalities to terminate P.A. 425 agreements before completion.

The interest of the present research of including in the sample all P.A. 425 contracts completed is threefold. The first reason is to determine whether any type of economic development had occurred within the communities located on the parcel of land transferred. It is important to point out that in this category firms and businesses, and commercial and infrastructure development located on parcels of land transferred under P.A. 425 legislation are differentiated based on a "before and after" criterion. The reasons for using this principle are explained in the section addressing the design of the questionnaires used to collect the data. Second, to determine if the contracts had been

renewed or renegotiated upon expiration. In this sense, agreements renewed would suggest to the researcher that the original contracts were beneficial to both parties, and agreement renewal was a rational course of action. A third important issue for the purposes of this research of including the contracts completed is to find out whether any changes had been made to the provisions of the original P.A. 425 agreements. The goal is to identify the reasons why such changes were introduced. The second and third aspects are important criteria for this research. Nevertheless, a community economic development change is by far the most important criterion this paper is concerned upon. As of October of 1997, six P.A. 425 contracts had been completed among several municipalities in the state of Michigan. All these agreements were included in the sample.

The third category of the sample is composed of contracts effective for more than four years. There are several reasons why this criterion was used. First, a four year period was considered by the researchers as a reasonable time span for any type of economic development to occur in the communities located on transferred parcels of land. Another important aspect considered when selecting the contracts to be included in this category was the total time span agreements had been in force. Furthermore, P.A. 425 contracts that had been executed for longer total periods of time were given priority to be included in the sample. For instance, between two agreements that had been effective for more than four years, the one that was executed first (effective for more years) was given priority. The rationale for using such a criterion is that longer time span agreements would have more probabilities of any changes in economic development resulting from the execution of P.A. 425 legislation. In addition, the researchers could

obtain the data needed to conduct this study from contracts executed for longer periods of time, as changes in economic development may have been recorded and quantified by the municipalities directly affected by the agreement. As a result, important data for the purposes of this research could be available. A total of eight contracts are included in this category.

Survey Design

In order to generate the data needed to conduct this research, four survey instruments were designed. These surveys are included in the Appendix of the paper. The surveys on "contracts completed" and "in force for more than four years" are similar since they both gather data on the same economic development indicators. They are composed of five sections. The first section collects information on demographics, purpose of the contract as stated and public services needed that lead to the execution of the agreement. The second, third, and fourth sections of these instruments collect data on industrial and commercial development, infrastructure and residential development occurred on the parcel of land transferred before and after P.A. 425 agreements were executed. The objective of gathering information on a "before and after" P.A. 425 legislation being executed basis, instead of a "with" and "without" scenario, is to provide the researcher with an idea of the degree or conditions of economic development on the parcel transferred before and after a P.A. 425 agreement was executed. The fifth section of both questionnaires asks questions about the current status of the contract, whether it was renewed after expiration or if the municipalities intend to do so upon termination. The objective of this last section is to determine whether the units of government involved in the execution of P.A. 425 legislation were satisfied with the results achieved.

These two surveys are the core of the research for they were designed to generate data providing insights as to whether the P.A. 425 legislation has achieved its intended purpose. Chapter four of the paper deals with the issue of presenting and analyzing the data collected in a meaningful manner.

The survey designed to collect data on "contracts rescinded" is composed of two sections. The first section obtains data on the demographics and other aspects similar to the first section of the surveys for "contracts completed" and "in force for more than four years". The second section of the survey asks to identify the key factors that played a role in rescinding the contract before the originally agreed time period. It also poses the question of what changes would the municipalities make in the contracts in order to make them more attractive to compliance. The objective of this last section of the survey is to obtain first hand information on what aspects need to be changed in the structure of the law, so that policymakers are informed about alternative ways to redesign the current statute.

The fourth survey was designed to collect information from commercial enterprises, businesses, and industrial facilities located on the parcel of land transferred before and after P.A. 425 legislation was executed. The survey is composed of two sections. The first section gathers data on the characteristics of the business or firms located on the transferred land on selected economic indicators. The second section of the survey is designed to collect data on characteristics of the parcel that prompted firms and businesses to locate in the area. Needless to say, the idea is to determine whether public services (made available by P.A. 425 legislation) played a role in the location decision of the firm.

The survey is mainly concerned with collecting data from firms or businesses on the number of employees, payroll size, and amount of property taxes paid within the context of an ex-ante and ex-post analysis. Economic development changes in the observed region are very likely to affect these indicators in several manners. For instance, if regional economic growth is accelerated, the employment level in the area is expected to increase as firms and businesses expand, or new businesses come in. Firms established on the parcel of land before the execution of P.A. 425 legislation are asked to provide information on the number of employees, payroll size, and property taxes paid to local governments the immediate tax year before agreements are executed and the 1997 and 1998 tax year. The next section of the chapter addresses the issues and methods related to collection of the data needed to conduct this research.

Data Collection

The main procedure used to collect the data in this research is by mailing the questionnaires to the parties to agreements included in the sample with follow-up phone calls made one week later. In the case of the P.A. 425 contracts rescinded, both local government units were mailed surveys. In contrast, in the categories "contracts completed" and "contracts still in force" only recipient units of transferred land were sent the surveys. The rationale behind such approach is that recipient units are the most likely to have information about the economic indicators defined to measure economic growth in the communities located on the tract of land transferred. For "contracts completed" and "in force for more than four years", only the recipient units of land received the questionnaire. Most questionnaires were addressed to township supervisors and city managers for they were considered to be the most likely people to know or have

access to the information required to answering the questions in the surveys. In the case that municipalities did not have managers, surveys were addressed to municipal administrators and/or clerks. A week after the surveys were mailed out, the researcher started to contact the official from each municipality to know if problems with answering the questionnaire had arisen. In the follow-up interview most officials said that the surveys were easy to understand and fill out.

The fourth survey (on economic development of communities and P.A. 425) was intended to be sent to commercial enterprises, firms, and businesses established on the transferred land before and after P.A. 425 agreements had been executed. Such an approach was later changed to telephone interviews. Telephone interviews were scheduled in order to converse with human resource managers, and other employees within the firms considered being the most likely to provide the information needed.

Economic Indicators to measure Economic Development

The indicators selected to measure the economic development of the community on the transferred land after P.A. 425 agreements were executed are changes in the property tax base, the number of jobs created within the parcel of land, and firms' payroll size. The criteria used to select these indicators were based on the results of the literature review conducted in chapter two. For instance, Biehl concluded in his research that productivity, income, and employment are an increasing function of the infrastructure endowment of a particular region (Biehl, 1991). From this conclusion then, changes in the provision of infrastructure that resulted from the execution of P.A. 425 agreements should have an impact on these indicators on the community investigated. Measurement

of those changes is achieved by performing ex-ante and ex-post analysis of the data collected.

Infrastructure also impacts employment by making a location more attractive to firms, affecting the location decisions of firms. As firms establish on the parcel transferred, employment opportunities are created, as well as income and the potential for increasing property tax revenues.

Descriptive Statistics

Descriptive statistical procedures will be used to analyze the data gathered from the selected units of government that engaged in P.A. 425 agreements. The conclusions drawn from the analysis of the data obtained will emphasize policy implications and suggestions for future research on this interesting and yet not well researched topic.

Chapter Four: Results

The results of the current research are presented in this chapter. Descriptive statistics are used as the main tool of analysis. The first section presents a summary of all P.A. 425 agreements included in the research sample. The second section of the chapter presents an analysis of all the contracts in the sample broken down by categories. The categories defined in this research are contracts rescinded, completed, and in force for more than four years. The third section of the chapter analyzes information obtained from the fourth survey, which collected data on economic development indicators (i.e. employees, payroll size, and property taxes), from firms and businesses located on the parcels of land transferred under the provisions of P.A. 425 legislation.

Summary of P.A. 425 Agreements included in the Sample

The research sample is composed of twenty contracts executed among various municipalities in the state of Michigan since 1984. Appendix A provides a summary of both the 130 agreements on file as of October of 1997, and the 20 P.A. 425 agreements included in the research sample. Breaking down the period of execution of the contracts included in the research sample pinpoints a difference between the number of contracts executed with relation to time. In the sample, six agreements (30 percent) were executed between 1985-1989. The remaining four contracts (70 percent) were executed between 1990 and 1997 (Table 1). Such a difference could be explained by lack of knowledge about the law after it was enacted. As the Act became widely known, more municipalities engaged in P.A. 425 contracts as a tool to encourage community economic development while mitigating the problems associated with annexation.

Table 1
Executing Period of P425 Agreements. Research Sample

PERIOD FILED	TOTAL PA425 CONTRACTS	SAMPLE
1985-87	9	4
1988-89	23	2
1990-93	53	11
1994-95	30	2
1996-97	15	1

Municipalities executing P.A. 425 agreements cited reasons as to the purpose for developing the joint agreement. In this regard, 12 agreements stated the provision of sewer and water services as the objective of the contracts. This number of contracts represents 60 percent of the sample. In addition, 25 percent of the agreements stated the provision of municipal services as their purpose. The remainder of the contracts established industrial, commercial, and economic development as the main reason for P.A. 425 agreement execution (Table 2)

Table 2
Purpose of P.A. 425 Agreements. Research Sample

PURPOSE OF CONTRACT	NUMBER OF AGREEMENTS
Sewer and Water	12
Municipal Services	5
Industrial Development	1
Economic Development	1
Commercial Development	1

The average length of the contracts sampled is 19.75 years. A contract between the City of Otsego and Otsego township holds the distinction of being the shortest contract in the sample, one year. On the other hand, there are four P.A. 425 agreements included whose length is 50 years, the longest time span permitted by the statute. The highest frequencies of contract length are 5, 10, and 50 years with four contracts being executed in each category (Table 3).

Table 3
Length of Agreements

LENGTH OF AGREEMENT (YEARS)	TOTAL PA425 CONTRACTS	SAMPLE
1-10	15	11
11-20	14	2
21-30	18	2
31-40	1	1
41-50	82	4
Average	37.9	19.75

The parties to the agreements included in the research sample are presented in Table 4. In the sample, 14 agreements fall in the category "township-city arrangement". Such finding is also consistent with the characteristics of the whole sample of 130 P.A. 425 agreements on file, where 112 contracts were executed under the same arrangement. Harvey (1997) claims that the frequency of this arrangement shouldn't be a surprise for annexation disputes are most common between township and cities which makes P.A. 425 agreements more appealing to such governments. The frequency of other arrangements is as follows: two contracts executed between township-township

governments, three agreements between township and villages, and one contract executed under the city-city arrangement. The majority of P.A. 425 agreements mandate reversal of the conditionally transferred parcel of land to its original unit of government

Table 4
Contract Participants to P.A. 425 Agreements

GOVT UNITS	TOTAL PA425 CONTRACTS	SAMPLE
Township-City	112	14
Township-Township	7	2
Township-Village	10	3
City-City	1	1

upon termination of the contract. Thirteen agreements (65 percent) establish reversion of the land after agreement expiration. On the other hand, seven agreements (35 percent) require the land to be permanently transferred to the recipient unit of government.

Table 5
Disposition at End of Agreement

DISPOSITION UPON TERMINATION	TOTAL PA425 CONTRACTS	SAMPLE
Reverts to Original Jurisdiction	42	13
Permanently Transferred	57	7
Renegotiate At Expiration	28	1

The PA425 legislation contains permissive language for the development of a revenue sharing agreement between local units. In most cases, a revenue sharing

agreement is developed that makes the transferring unit whole, that is, the unit transferring land receives the same if not more revenue under the agreement for a stated period. The revenue sharing options are quite diverse and include: sharing of revenue from a specific number of mills levied on the property transferred, providing bonus revenues (replacing revenues the unit would lose plus additional incentives revenues), paying a flat amount per year to the transferring unit, paying a fixed percentage of revenues collected from the transferred property, sharing a portion of state shared revenues with the transferring unit, and in some cases, no sharing of revenues.

This section of chapter four described some characteristics of all P.A. 425 agreements included in the research sample. The descriptive analysis of the sample brings up some important aspects of the legislation such as length of time, disposition at the end of the agreement, and the revenue sharing provision that need further research. Thirteen agreements (65 percent) mandate reversal of the transferred land to its original unit of government after contract termination. Agreements with short time spans and reversal clauses present a potential problem to units of government extending public services for at the time of contract termination the initial infrastructure investment made could have not been recovered. For example, the agreement between the city of Otsego and Otsego Township had a length of 1 year. In addition, no revenue sharing clause was established in the contract. However, the agreement mandated permanent transferal of the land to the township once the contract ended. In this particular case, the initial investment made by the township in infrastructure and the provision of other public services could be recovered once the parcel is transferred permanently to the township upon contract expiration. There are some agreements in the sample however, that present

short times of execution and establish reversal of the land when the contracts expire. Further research on this topic is recommended. Agreements executed for longer periods of time and containing reversion provisions have the potential to create problems in the long run. Common problems associated with such long agreements can be loss of identity of the communities located on the transferred land and public officials' ignorance about the status of P.A. 425 agreements executed in their jurisdiction. Upon contract expiration, citizens established on the parcel of land subject to reversal may have developed such a strong bond to the recipient municipality that they may not want the land to be reverted back to the original government. Harvey (1997) claims that since parties to the original agreement will not be around when contracts expire in most cases, issues about the propriety of the land could also arise. Adversity between contracting municipalities and damage of intergovernmental relationships can result from such situation. The reversal problem could also lead municipalities to courtrooms as a means of seeking a possible solution to the problem. The longer the contract is the higher the probabilities such outcome will show up once it expires. In addition, longer contracts also present the problem of public officials' lack of knowledge about the status of P.A. 425 agreements. Public officials in office once an agreement expires may not be the same who executed it. Officials elected after the execution of P.A. 425 agreements may not know the whereabouts of the contracts executed, and responsibilities associated with it. Such possibility raises the question of whether the objective of the agreement was not only achieved, but also if the contract's results have been recorded so that it can be systematically evaluated. Policy makers and local public officials need to be aware of these problems, and their consequences.

Contracts Rescinded

Six of the 130 P.A. 425 filed with the office of the Great Seal were rescinded for a variety of reasons. The rescinded contracts and units involved are displayed in Table 6.

Table 6
P.A. 425 Contracts Rescinded. Research Sample

DATE EXECUTED	GOVT UNITS	DATE RESCINDED
03/27/89	Bagley Tw- City of Gaylord	08/92
09/11/90	Bagley Tw- City of Gaylord	08/92
06/03/91	Marengo Tw- City of Marshall	10/91
08/20/90	City of Marlette- Marlette Tw	01/95
10/24/88	Swan Creek Tw- St. Charles Village	10/94
05/11/93	City of Utica- City of Sterling Heights	06/96

In this category, surveys were mailed to all municipalities involved in contracts that were rescinded. Ten of the 12 governments returned the surveys. The townships of Marlette and Marengo did not return the surveys. Of the six contracts, four were executed between townships and cities. The average length of time the agreements were executed before rescission was three years. Such a short time period of execution raises the question of whether enough time was allowed for any type of economic development to occur on the transferred parcel, and if any investment made by the recipient unit was recovered.

The average population of the units of government that rescinded P.A. agreements is 13,036 people. The City of Sterling Heights is the most populated with 117,810 people living within its boundaries. Marengo township is the least populated with 1,810 people

(Table 7). Most of the other localities included in the category recorded populations below 10,000 people.

Table 7
PA425 Contracts Rescinded. Research Sample

CONTRACT	GOVT UNITS	POP**	LAND AREA (SQ MILES)	MILLAGE RATE (1998)
1	Bagley Tw	4,929	33.0	6.33*
	Gaylord	3,256	2.70	12.08
2	Bagley Tw	4,929	33.0	6.33*
	Gaylord	3,256	2.70	12.08
3	Marshall	6,891	5.64	15.46
	Marengo Tw	1,801	35.20	2.54
4	Marlette	2,060	1.0	0.02
	Marlette Tw	1,910	1.61	1.95*
5	Village of St. Charles	2,200	2.0	12.80
	Swan Creek Tw	2,346	36.0	0.95
6	Utica	5,050	1.90	18.22
	Sterling Heights	117,810	36.0	11.22
Average		13,036	13.08	10.80

* 1997 millage rate. ** 1990 US Census.

The average land area of the units of government is 13.084 square miles. The average millage rate levied is 10.80. Millage rates for the 1997 tax year were used for the township of Bagley since the township did not report such figures in the survey.

The average length of the agreements rescinded was 25 years. Such an average is longer than the 19.8 average years found in the average research sample. In addition, the average land area of the parcels transferred is 65.96 acres. Nevertheless, this average is inflated by the agreements executed between the village of St. Charles and Swan Creek township (60 acres) and between the city of Utica and Sterling Heights (320 acres).

Indeed, four of the revoked P.A. 425 agreements transferred land with total areas of less than 10 acres.

Table 8
Land Area of Transferred Parcel. Contracts Rescinded

GOVT UNITS	AREA PARCEL TRANSFERRED (ACRES)	LENGTH OF CONTRACT (YEARS)
Bagley Tw & Gaylord*	10	5
Bagley Tw & Gaylord*	2	10
*Marshall & Marengo Tw	0.50	50
*Marlette & Marlette Tw	3.26	40
Village of St. Charles & Swan Creek Tw	60	30
Utica & Sterling Heights	320	15
Average	65.96	25

* City

The purpose of the rescinded agreements was primarily defined as commercial and industrial development. This is not a surprising finding since the Act mandates the existence of economic development projects as a requirement for P.A.425 agreements to be executed. However, five out of six units of government reported sewer and water as the services needed that prompted the municipalities to engage in P.A. 425 legislation. This finding seems to support the conception that availability of sewer and water services is an important requirement for economic development to occur. The contract between the city of Marlette and Marlette Township required the provision of municipal services. Nevertheless, in this case a business located on the parcel of land transferred needed a liquor license to operate, and the township had one available. Through the execution of a

P.A. 425 agreement the parcel was transferred and the license granted. Whether contract execution made available municipal services to the transferred land or not is unclear.

Table 9
Public Services Extended. Contracts Rescinded

GOVT UNITS	SERVICE PROVIDED
Bagley Tw and City of Gaylord	Sewer and water
Bagley Tw and City of Gaylord	Sewer and water
City of Marshall and Marengo Tw	Sewer and water
City of Marlette and Marlette Tw	Municipal services
Village of S. Charles and Swan Creek Tw	Sewer and water
City of Utica and City of Sterling Heights	Sewer and water

The units of government surveyed expressed various reasons for rescission of the agreements before completion. The developer's unwillingness to pay the costs associated with the extension of public services was cited as the primary reason in the contract between the city of Marshall and Marengo Township. The agreement between the city of Marlette and Marlette Township was terminated as a result of the property owner's request. Finally, the city of Utica and the city of Sterling Heights claimed legal reasons as the driving force to rescind the agreement. A third party (Shelby Township) sued both cities in a local court over the agreement. The specific reasons why Shelby township took such course of action are unknown since the township was not included in the sample. The rest of the units of government in the category did not report the reasons for rescinding the contracts.

Five units of government reported no change in their intergovernmental relationships. This is a surprising finding for the researcher was expecting governmental

relationships to be stressed among these municipalities as a result of contract rescission. The government reporting changes in intergovernmental relationships (2) claimed that such a change had been for the better since their relations had improved. The city of Marlette was the only government claiming that its governmental relationships had deteriorated.

Two municipalities affirmed they would execute another P.A. agreement. The remainder six units answering the survey claimed they either would not engage in another agreement or didn't know if they would do so in the near future (Table 10)

Table 10
Engage In Other P.A. 425 Agreement. Contracts Rescinded

ANSWER	GOVT UNITS
Don't Know	4
Yes	2
No	2

Units of government suggesting modifications to the agreements cited longer time periods of execution as a change they would make to newer agreements. As to how long they would increase the length is unknown. In this regard, the Act states 50 years as the longest period of time contracts can be executed. In addition, the Act also establishes agreement renewal up to the same time period if municipalities so desire. It is unclear why municipalities would recommend a longer time limit with a renewal provision available in the law. Transaction costs associated with executing agreements seem to be part of the answer. To the extent that units of government perceive transactions costs of reaching an agreement as being large, there is an incentive to enter in longer agreements.

From the public policy standpoint, government actions to eliminate or reduce such transaction costs can relieve municipalities of the financial burden they represent.

Four of the eight of the units surveyed considered annexation before engaging in P.A. 425 agreements. The other four municipalities did not. As to the question of how they had learned about the statute, the majority of the governments responded they knew about P.A. 425 mainly from governmental and educational institutions.

This section of chapter four analyzed data collected from the units of government that had rescinded P.A. 425 agreements before completion. The policy implications and suggestions as to how interpret these results are discussed in chapter five.

Contracts Completed

The research sample included six P.A. 425 agreements completed as of October of 1997. Table 11 contains all such contracts. As observed in the table, there are three agreements executed under the city-township arrangement, representing 50 percent of the sample.

Table 11
PA425 Contracts Completed. Research Sample

DATE EXECUTED	GOVT UNITS	COMPLETED
06/19/90	Berlin Tw and City of Ionia	06/97
04/13/91	Big Rapids CT and Green Tw	04/96*
08/13/85	Caseville Tw and Village of Caseville	08/97
07/01/92	Grant Tw and Village of Rothbury	07/97
09/28/90	Livingston Tw and City of Gaylord	09/95
09/12/94	City of Otsego and Otsego Tw	09/95

* renewed upon expiration until 04/97.

Table 12 shows the population, land area, and millage rate of all governments included in the category. The table also shows the average population (2,920 people), land area of the units involved (19.5 square miles), and millage rate levied of 10.6 mills.

Table 12
Population, Land Area, and Millage Rate. Contracts Completed

CONTRACT	GOVT UNITS	POP**	LAND AREA (SQ MILES)	MILLAGE RATE (1998)
1	Berlin Tw	3,610	42.10	0.93*
	City of Ionia	5,935	2.80	6.97*
2	Big Rapids CT	3,100	29.0	2.58*
	Green Tw	8,833	36.90	1.25*
3	Caseville Tw	2,139	13.90	1.04*
	Village of Caseville	720	1.20	12.68*
4	Grant Tw	2,578	35.40	2.18*
	Village of Rothbury	407	1.0	7.0
5	Livingston Tw	1,755	34.30	0.60*
	City of Gaylord	3,256	2.70	12.08
6	City of Otsego	3,937	1.80	13.34*
	Otsego Tw	4,780	33.40	3.35*
Average		2,920	19.50	10.60

* 1997 millage rate. ** 1990 US Census.

The averages shown in table 12 differ from the same averages found in the contracts rescinded category. The average population for contracts rescinded was 13,036 people. Nevertheless, this average was inflated by the city of Sterling Heights with a population over 100,000 people. The policy implications and importance of population in the provision of public services for local governments is discussed in the next chapter. The average length of contracts completed is 6.5 years. The frequency of agreements

executed to provide public services, specially sewer and water, reaffirms the perception of the importance this type of infrastructure possess for economic development (Table 13).

Table 13
P.A 425 Contracts Completed. Purpose and length

GOVT UNITS	PURPOSE	LENGTH (YEARS)
Berlin Tw and City of Ionia	Sewer and water	7
Big Rapids CT and Green Tw	Sewer and water	5
Caseville Tw and Village of Caseville	Water and roads	12
Grant Tw and Village of Rothbury	Municipal services	5
Livingston Tw and City of Gaylord	Sewer and water	5
City of Otsego and Otsego Tw	Municipal services	1
Average		6.5

The agreement between Grant Township and the village of Rothbury presents a characteristic highlighting the versatility of P.A. 425 legislation that needs further discussion. In this case, a business located on the parcel of land transferred needed a liquor license and the Village of Rothbury had one available. The business obtained the license by executing a P.A. 425 agreement. The question that arises is what has a liquor license got to do with the provision of municipal services and economic development stated as the purpose of the contract? Phone interviews with public officials at the village of Rothbury showed that public services such as police protection, and sewer and water were also needed to provide police services (public safety) and to support business expansion after the license was granted.

In this category six units of government were mailed the surveys (recipients of land). Three of them returned the surveys. Phone interviews with public officials at some of the municipalities that did not return the surveys indicated that costs associated with getting the information (i.e. extension and value of infrastructure built) was a major reason not to fill out and return the surveys. Indeed, Green Township officials claimed that getting the information requested in the survey would require them to hire an engineering consulting firm, a costly option the municipality either was unable to bear or did not want to take.

These units aid complete the survey and provide insights as to the outcome from a P.A. 425 agreement. The village of Caseville and Rothbury reported existing firms located on the transferred parcel of land before execution of P.A. 425 agreements. These firms are identified as Moco Thermal Industries Inc (formerly Michigan Oven Company) in Caseville, and Double JJ Resort in Rothbury. They also reported no new firms coming into the area after contract implementation. On the other hand, the city of Gaylord reported the opening of a Taco Bell restaurant in the area after the contract was signed. No commercial development was present in the area before. Caseville and Rothbury also affirmed that the extension of public services into the parcel resulted in expansion of existing firms (Table 14).

Table 14
Expansion of Existing Firms. Contracts Completed

GOTV UNITS	ANSWER
City of Gaylord	Not applicable
Village of Caseville	Yes
Village of Rothbury	Yes

The city of Gaylord reported infrastructure development occurring in the area after the agreement was enforced. Nevertheless, the municipality did not identify the specific type of development and its value. The municipalities of Caseville and Rothbury did not report any changes in infrastructure on the land after the agreements' execution. All units of government stated that no residential development occurred in the areas covered by agreements.

Questions 5.1 through 5.4 in the survey address the issue of contract renewal upon expiration (Table 15). The city of Gaylord and the village of Rothbury renewed the agreements after they expired. In addition to renewing the agreement, the village of Rothbury also changed the revenue sharing. The village of Caseville, the only government that did not renew the contract claimed administrative procedures as the reason for not renewal (i.e. was not applied for).

Table 15
Contract Renewal. Contracts Completed

GOVT UNITS	CONTRACT RENEWAL	MADE CHANGES
Gaylord	Yes	No
Caseville	No	N/A
Rothbury	Yes	Yes

In the sample, only the city of Gaylord considered annexation as a condition to extend public services into the parcel of land transferred. Other governmental institutions continue to be the predominant means of knowing about the Act (Table 16).

Table 16.
Annexation as Condition. Contracts Completed

GOVT UNITS	CONSIDER ANNEXATION AS A CONDITION?	LEARN ABOUT PA425
Gaylord	Yes	Government Institution
Caseville	No	Educational Institution
Rothbury	No	Government Institution

Contracts Still in Force

The sample category defined as "contracts still in force" is composed of eight P.A. 425 agreements. The break down of the agreements is discussed next (Table 17). Two agreements are executed between the city of Charlotte and Carmel township; a

Table 17
PA425 Contracts Still in Force. Research Sample

DATE EXECUTED	GOVT UNITS
01/01/92	Carmel Township and City of Charlotte
07/19/93	Carmel Township and City of Charlotte
02/13/92	Eaton Township and City of Charlotte
03/29/85	Lapeer Township and City of Lapeer
07/17/86	York Township and City of Milan
11/04/96	Alpine CT* and Plainfield CT*
12/13/94	Lenox Township and City of Richmond
11/01/86	Richmond Township and City of Reed City

* Charter Township.

contract between Eaton Township and the city of Charlotte; an agreement between Lapeer township and the city of Lapeer, a contract executed between York township and

the city of Milan; Alpine charter township and Plainfield charter township; Lenox Township and the city of Richmond; and Richmond Township and the city of Reed City. Seven of the eight contracts are executed between a city and a township. One contract is executed between two charter townships.

Table 18
Population, Land Area, and Millage. Contracts Still in Force

CONTRACT	GOVT UNITS	POP**	LAND AREA (SQ MILES)	MILLAGE RATE (1998)
1	Carmel Tw	2,433	34.1	0.93*
	Charlotte	8,083	5.20	14.53
2	Carmel Tw	2,433	34.10	0.93*
	Charlotte	8,083	5.20	14.53
3	Eaton Tw	3,492	32.80	0.93*
	Charlotte	8,083	5.20	14.53
4	Lapeer Tw	4,519	32.0	1.70*
	Lapeer	7,759	4.50	8.79*
5	York Tw	6,225	35.20	1.61*
	Milan	5,000	2.35	14.75
6	Alpine CT	9,863	35.90	2.41*
	Plainfield CT	28,750	35.50	2.35*
7	Lenox Tw	5,400	38.80	2.31*
	Richmond	4,141	2.50	18.11*
8	Richmond Tw	1,722	33.20	1.0*
	Reed City	2,379	2.50	14.84
Average		6,773	20.0	5.85

* 1997 millage rate. ** 1990 US Census.

The average population for the municipalities included in the category is 6,773 people (Table 18). Plainfield Charter Township presents the largest population with 28,750 people. The second party to this contract, Alpine Charter Township, has also a

larger population than any other unit of government in the sample with 9,863 people. The least populated unit of government is Richmond Township, which reported 1,722 people. The average land area of the units involved in the agreements is 20 square miles. The average millage rate is 5.85 mills, with the highest at 18.11 mills, and the lowest at 0.93 mills. The city of Richmond levies the highest millage rate of all units included in the research sample. Carmel and Eaton Townships are the governments assess the lowest millage rate, 0.93 mills.

The services extended or provided due to the execution of P.A. 425 agreements are primarily sewer and water services (Table 19). The contracts executed between Carmel Township and Charlotte, Eaton Township and Charlotte, and Alpine Charter Township and Plainfield Charter Township state municipal services as the services being provided. Such a category includes sewer and water services as well.

Table 19
Public Services Provided. Contracts Still in Force

GOVT UNITS	SERVICE PROVIDED	LENGTH OF AGREEMENT
Carmel Tw and Charlotte	Municipal services	10
Carmel Tw and Charlotte	Municipal services	10
Eaton Tw and Charlotte	Municipal services	10
Lapeer Tw and Lapeer	Sewer and water	50
York Tw and Milan	Sewer and water	50
Alpine CT & Plainfield CT	Municipal services	24
Lenox Tw and Richmond	Sewer and water	6
Richmond Tw and Reed	Sewer and water	50
Average		26

The contract between Alpine Charter Township and Plainfield Charter Township is broader in scope than any of the other seven agreements. This contract provides municipal services in general, which also include cemetery, library, emergency medical, and planning and development services among others. The length of the agreements extends from six years o the maximum allowable time of 50 years. The average length of the agreements is 26 years.

Upon completion, five of the agreements transfer the land permanently to the unit of government providing the service, whereas three of them mandate the land to be reverted to its original unit (Table 20).

Table 20
Disposition End of Agreement. Contracts Still in Force

DISPOSITION	NUMBER OF AGREEMENTS
Transfer to recipient Unit	5
Reverts to original Unit	3

The survey in this category was sent to the eight units of government that received transferred land, and seven municipalities returned the completed surveys.

Table 21
Commercial Development Prior to P.A. 425. Contracts Still in Force

COMMERCIAL DEVELOPMENT PRIOR TO PA 425?	GOVT UNITS
Yes	3
No	3
Didn't answer	1

The cities of Lapeer, Milan, and Richmond reported some type of economic activity occurring on the transferred land before agreement execution (Table 21). In the case of Lapeer three retail, a service oriented, and heavy industrial firms were identified. The cities of Milan and Richmond listed retail firms on the parcel as well. Only the city of Lapeer agreed on the statement that the extension of municipal services into the transferred area resulted in expansion of the existing firms.

The cities of Lapeer and Milan also recorded growth in the areas transferred after P.A. 425 agreement implementation. The five new firms established in Lapeer, as well as the one established in Milan, were all retail and service oriented businesses (Table 22). The list of these firms and their impact on the economic development of the area, as measured by their contribution to local tax revenue bases, is the subject of analysis of the next section of this chapter. In addition, four municipalities did not observe any kind of economic development on the parcels transferred

Table 22
Commercial Development After P.A. 425. Contracts Still in Force

COMMERCIAL DEVELOPMENT AFTER PA 425	GOVT UNITS
Yes	2
No	4
Didn't answer	1

The charter township of Plainfield was the only municipality recording any type of infrastructure on the transferred parcel before the execution of P.A. 425 legislation. Plainfield did not disclose the value of such infrastructure. Table 23 on the other hand, shows the answers given by the seven municipalities to the question of whether any

infrastructure development had occurred after implementation of P.A. 425 agreements. The cities of Lapeer, Milan, and Richmond, and Plainfield Charter Township reported infrastructure development on the parcels.

Table 23
Infrastructure Development After P.A. 425. Contracts Still in Force

INFRASTRUCTURE DEVELOPMENT AFTER PA	GOVT UNITS
Yes	4
No	3

The extension and value of the infrastructure developed by these units of government are shown in Table 24. The city of Lapeer recorded various types of infrastructure development occurring on the parcel subject to transfer. The infrastructure built in Lapeer is broken down as follows: 5,484 linear feet of sewer lines with an approximate value of $543,590; approximately 5,581 linear feet of watermain lines with a reported value of $554,660; and 6,183 linear feet of storm pipe with a value of $618,300. The total value of this infrastructure development is approximately $1,716,550 (Table 24).

Table 24
Infrastructure Development After P.A. 425. Contracts Still in Force

GOVT UNITS	QUANTITY	APPROXIMATE VALUE
Lapeer	17,248 linear feet	$1,716,550
Milan	600 linear feet	Not provided
Plainfield	15,840 linear feet	$450,000

The city of Milan did not report the approximate value of public services extended into the parcel. However, it did indicate the break down of new infrastructure built in the area: 400 linear feet of sanitary sewer, and 200 linear feet of water lines. Plainfield Charter Township accounted for 3 miles (14,544 linear feet) of water lines built with a total value of approximately $450,000. The city of Richmond did not provide both the type and value of public infrastructure constructed. Follow-up with this municipality may provide future research with the needed figures.

Six municipalities did not report any residential development occurring on the transferred land after agreement implementation. Plainfield Charter Township did not provided answers to the questions in the survey (Table 25).

Table 25
Residential Development After P.A. 425. Contracts Still in Force

RESIDENTIAL DEVELOPMENT AFTER P.A. 425	GOVT UNITS
Yes	0
No	6
Didn't Answer	1

Most units of government rated their intergovernmental relationships with the other parties to the contract between fair and excellent. Table 26 below provides the types and numbers of the specific responses. The municipality of Richmond did not answer the question presented.

Table 26
Inter-governmental Relationship Rating. Contracts Still in Force

RATING	GOVT UNITS
Excellent	4
Good	1
Fair	1
Didn't answer	1

The cities of Lapeer and Milan affirmed that the economic development of the transferred parcels had been accelerated by the execution of P.A. 425 agreements. The cities of Charlotte and Richmond on the other hand, claimed that no economic development had occurred after the implementation of any of such agreements.

As to the question of whether they intend to renew the contracts upon expiration, the cities of Milan and Charlotte were the only municipalities reporting that they would renew the agreements. The contract Charlotte intends to renew is the Carmel 1993 Township agreement. The city of Lapeer, which recorded a considerable amount of economic development in the area due to P.A. 425 agreement, did not provide an answer to the question.

Other governmental units and institutions continue to be the main source by which municipalities learned about P.A. 425 legislation. Five of the municipalities surveyed affirmed they knew about P.A. 425 through official institutions. In addition, 86 percent of the units in the sample affirmed they would execute another P.A. 425 contract (Table 27)

Table 27
Execute Another P.A. 425 Agreement. Contracts Still in Force

ENGAGE IN ANOTHER P.A. 425 AGREEMENT	GOVT UNITS
Yes	7
No	1

Four municipalities in the category considered annexation as a condition for providing public services (Table 28). Two of them did not see annexation as an alternative

Table 28
Consider Annexation as Condition. Contracts Still in Force

ANNEXATION AS ALTERNATIVE	GOVT UNITS
Yes	4
No	2
Didn't answer	1

Economic Development Indicators

The preceding sections presented and analyzed the data compiled on general aspects of P.A. 425 legislation. This section of chapter four is oriented toward the examination of data obtained on the economic development indicators selected in chapter 3 as proxies to measure economic growth occurring on the parcels of land transferred. The parameters selected to measure the economic growth on these parcels are the number of employees, the total payroll size, and the amount of property taxes paid to local governments by each individual firm identified by the municipalities surveyed as located on the parcel. Information on the property taxes variable is intended to be collected both

on the immediate tax year before agreements were executed and the 1997 tax year. The rationale for selecting a the 1997 tax year, as opposed to collecting data on all years after agreement implementation is that the last year would provide a snap-shot of the amount of taxes collected by the local government. This amount then, could be used as an estimator of the taxes paid by the firms for the previous years. Problems associated with availability of the information, and unwillingness to provide "sensitive" or "privileged" information by the firms proved to be major obstacles this study faced. These issues however, are addressed in more depth in the conclusions below.

The only economic indicator on which complete information could be obtained was property taxes paid by the firms to local governments. The property tax amounts were obtained through phone interviews with tax assessors and treasurers of the municipalities surveyed. Data on the number of employees of certain firms was collected as well. However, most firms did not disclose any information on the number of employees, payroll size, and taxes paid in the 1997 tax year. Human resources managers, personnel managers, and other interviewees contacted at the firms stated internal policies as being the primary reason not to give out such information. Notwithstanding all these problems, useful information was gathered. First, the data is presented at the aggregate level, indicating total taxes paid by all firms located on the transferred land. Second, the data is broken down by units of government in order to assess the magnitude of any economic growth processes taking place within the selected municipalities. The data collected on number of employees are presented at the individual level. Several municipalities reported firms and businesses of various types established on the transferred land before execution of P.A. 425 agreements. Obtaining

the information on taxes paid by these firms the immediate tax year before such agreements were implemented proved to be a difficult task. The older the agreement, the more difficult it was to obtain the needed information.

Six units of government reported a total of 16 firms located on the parcel of land transferred. Nine of these businesses located there before P.A. 425 legislation was executed. Data on property taxes paid by businesses located in the Village of Rothbury and the city of Milan was not obtained. The city of Lapeer and the village of Caseville did not provide the amount of taxes collected from the firms the previous years to agreement execution. Table 29 below shows the amount of property taxes collected by the municipalities before and after P.A. 425 legislation was executed. The city of Richmond was the only unit of government that provided firm's tax information the immediate year prior to contract execution.

Table 29
Taxes Paid by Firms. Aggregate Level

GOVT UNIT	BEFORE PA425	AFTER PA425 (1997 TAX YEAR)
Caseville Village	Not available	$22,101.68
City of Gaylord	Not applicable	$14,490.64
City of Lapeer	Not available	$217,325.39
City of Richmond	$18,053.48	$17,133.06

The city of Lapeer seems to have gone through an accelerated process of economic growth after the execution of P.A 425 legislation (Table 30). In this regard, five new firms located on the parcel of land transferred bringing in jobs and increasing the tax paid to the local government during the 1997 tax year. The total amount of taxes

collected by the city of Lapeer from these firms ascends to $ 147,038. Such an amount represents approximately 3 percent of the total taxes collected by the city in 1997. The big retailer Wal-Mart and Central Michigan Lumber also reported employing 225 "associates" and 41 employees respectively. The remaining firms coming into the area after P.A. 425 did not disclose any information on the number of on-site employees.

Table 30
Firms established after P.A. 425. City of Lapeer.

FIRM	1997 PROPERTY TAXES
Wal-Mart	$95, 499.12
McDonald's	$15,845.61
Rowely Development	$8,815.06
Central Michigan Lumber	$22,686.43
Lapeer Auto Plaza	$4,192.53
Total	$147,038.75

No business included in the list was able to provide information about the location decision aspects considered by the firms before choosing to establish on the transferred parcel of land. One aspect explaining such an outcome could be traced to the fact that location decisions are usually made by boards of directors at corporations' headquarters. In addition, many of the managers interviewed were not working for the firms when they decided to locate on the parcel. In some other instances, current owners acquired the business after it was established on the transferred parcel. Table 31 shows the amount of taxes paid by local firms established on the transferred land before the P.A. 425 agreement between the city of Lapeer and Lapeer Township was executed. The total

amount of property taxes paid to the city of Lapeer by these firms is $70,286,64, which represents approximately 1.5 percent of the total collected in the year. It was the original intention of this research to determine the amount of taxes paid by the same firms the immediate year before P.A. 425 was implemented. However, when requested, most municipalities did not have the information available. The problem increased the older the contract. Obtaining the information would require many resources most units of government were not willing to devote to conduct a search. The firms did not disclose data on the number of employees and payroll size.

Table 31
Firms established before P.A. 425. City of Lapeer

FIRM	1997 PROPERTY TAXES
Bessetes Body Shop	$10,426.47
Cambridge Industrial	$38,424.44
Gregory's Canvas	$2,736.80
Lapeer Rent All	$15,772.91
Short Stop Party	$2,926.02
Total	$70,286.64

Moco Thermal Industries, Inc. was located on the parcel of land transferred from Caseville Township to the village of Caseville before the agreement was executed. Furthermore, the main reason the village and township engaged in the agreement was to provide Moco with additional sewer and water capacity that would allow the firm to expand in the area. As a result, Moco would create 40 additional jobs, contributing to the overall economy of the region, and the local tax revenue base. To provide the firm with

more incentives, the local units of government conferred an industrial facility tax (IFT) to Moco. Such IFT was effective until the year of 1998. Interviews held with the village's treasurer indicated that the economic development of the parcel had not been enhanced as a result of public services extension. Moco paid $22,101.68 in property taxes in 1997. Information about the same variable on the immediate tax year before contract execution was not available either from the village or the firm.

An interesting finding from the research is the sharing revenue agreement reached by the parties to the contract. In this sharing revenue agreement the summer property taxes would belong to the village, and winter taxes would be allocated to the township. Interviews with managers at the firm did not provide the researcher with the relevant information needed to determine whether the firm had contributed to the economic development of the area. The interviewee did not answer location decision questions in the survey. As before, the main reasons not to answer these questions was plainly lack of knowledge about the decision making process. This type of limitation seems to be akin to big firms or corporations (i.e. McDonald's and Wal-Mart) where managers located at national headquarters, and usually far apart from the location of interest, make the location decisions.

The city of Gaylord reported some commercial development occurring on the transferred parcel after the execution of a P.A. 425 agreement. Gaylord informed the establishment of a Taco Bell restaurant in the aforementioned area. The restaurant contributed $14,490.64 to the local tax revenue base in 1997. This information was obtained from the treasurer of the city of Gaylord. The on-site manager did not want to

disclose any information on payroll size, number of employees, and property taxes paid in the 1997 tax year. The manager did not answer any location decision questions.

The city of Richmond reported the taxes paid by Reas Chevrolet, a car dealer, before and after the 1994 P.A. 425 agreement was executed with Lenox Township. The property taxes paid by the dealer totaled $18,053.48 in 1993, and $17,133.06 in 1997, which amounts to a grand total of $35,186.54. Information on the other economic indicators was not possible to obtain. Data on these variables would have shown whether the firm expanded over the years, creating more jobs, and enhancing the economic development of the region. The reason public services extended into the parcel of land as stated by the city of Richmond was to provide the dealership with infrastructure such as sewer and water to meet the environmental requirements imposed by local laws.

This chapter presented the results and interpretation of the data collected from the surveys sent to municipalities in the 20 agreements selected. The data was broken down by contracts' categories to facilitate the analysis. According to the results, sewer and water availability seem to be an important precondition for any economic development process to take place at a particular site. However, the provision of these services does not necessarily come with increasing economic development of the regions observed. The unavailability of data to analyze the municipalities' process of economic development is a factor that makes the current research fall short. Future research on the Conditional Land Transfer Agreement Act is encouraged, however, care and awareness of the problems encountered in this study is also advised as not to repeat the mistakes and limitations of this research.

Chapter Five: Summary and Conclusions

State policy makers faced the problem of rising annexation disputes in Michigan brought to courts by local governments and through the lobbying efforts of local government organizations adopted legislation addressing both annexation and economic development. The Conditional Land Transfer Agreement Act, P.A. 425, 1984 (MCLA 124.21-124.29) was originally designed as a tool to promote community economic development and to serve as an alternative to annexation. The Act is a unique public policy instrument in the state of Michigan. The loss of tax revenues and land resulting from annexation represented an important issue to cities and townships. The attractiveness of P.A. 425 stems from the legal framework that encourages economic development through intergovernmental cooperation. The legislation diminished the need for annexation as a means of obtaining infrastructure improvements and provided financial incentive for collaborating units of government. The Act permits the sharing of revenues, and eliminates the possibility of annexation of the land transferred while agreements are in force.

Twelve of the twenty agreements (60 percent) in the research sample stated the provision of water and sewer services as the principal reason prompting local units of government to engage in P.A. 425 legislation. If the contracts providing municipal services are included in this category, the figure climbs to 17 agreements (85 percent). This finding supports the general perception that sewer and water services are a precondition for economic growth to occur. This perception is also supported by various research cited in the literature review. Another important finding is the types of government arrangements implementing P.A. 425 agreements. Fourteen agreements in

the research sample (70 percent) are executed under the city-township arrangement. The fact that most annexation disputes occur between cities and townships, indicate that a P.A. 425 agreement is indeed considered an alternative to annexation. This assertion seems to be supported by the finding that nine units of government in the research sample indicated they had considered annexation before executing P.A 425 legislation. Most governments in the research sample indicated that no changes had occurred in their intergovernmental relationships with the other parties to the agreements. Indeed, in the contracts rescinded category, two municipalities reported improvements in the relationships between the two governments. The city of Marlette was the only government reporting deteriorating intergovernmental relations after the execution and rescission of their P.A. 425 agreement. The cities of Utica and Sterling Heights rescinded their P.A. 425 agreement due to a third party lawsuit. However, the rescission raises important questions and concerns about the effect P.A. 425 agreements may have on other governments exogenous to the contracts. Further research on this subject has the potential to answer these concerns. Seven governments rated their government relations with other parties to the agreement between excellent and fair.

Financial Analysis of P.A. 425 Agreements

The question of whether a P.A. 425 agreement is attractive to municipalities can be answered by a financial analysis of the costs and benefits of the P.A. 425 contract executed between the city of Lapeer and Lapeer Township. The financial analysis is presented in two scenarios, the township (unit transferring the land) and the city (unit receiving the land). The figures used to conduct the analysis are taken from the costs of infrastructure and tax revenues reported in the survey on economic development

answered by the city of Lapeer. Only the cost of infrastructure construction is included in the analysis due to constrains in obtaining other expenditures such as operational costs of the project (i.e. treatment plant). The 1997 millage levied by both governments, and the revenue sharing arrangement established by the P.A. 425 contract is used in analysis. The length of the analysis covers 50 years, which corresponds to the contract's length. The discount factor is calculated at 5 percent, which is very close to the current market interest rate. There are some characteristics of the analysis that need to be discussed. First, the cash flows obtained by both governments while the contract is in force are not adjusted by inflation. Second, it is assumed that no new development occurs in the parcel over time. Third, the millage rate of both units of government is kept constant over the contract's life span. Though somehow unrealistic, these assumptions make the financial analysis easier to conduct.

The Township's Perspective.

The city of Lapeer reported the existence of five firms in the transferred parcel before the contract was executed. The firms had a total taxable value of $7,996,204 times the township's millage rate of 1.7 mills yielded $3,593 in property tax revenues. The $13,593 represents the amount of taxes Lapeer Township would collect if the project were not executed. Such figure is found in Table 34 in the Appendix under "inflows". Since the township does not receive any other revenues, "total inflow" equals "inflows". Consequently, the net benefit for Lapeer Township under the "without project" scenario is $13,593.

After the parcel of land was conditionally transferred to the city 5 new firms were established adding $16,727,958 of taxable value resulting in a total taxable value of

$24,724,162. The P.A 425 agreement requires the city to annually reimburse the township 1.5 mills times the taxable value of the transferred property ($24,724,162 * 1.5 mills) which yields $37,086 in property tax revenue. The $37,086 is then adjusted by the amount of taxes Lapeer Township would receive without the project being executed ($37,086 - $13,593), a net yield of $23,492. This amount is shown in Table 34 under "inflows". In this case, "inflow" equals "total inflow" due to the assumptions made at the beginning to conduct the analysis. The expenditures in the "with project" scenario are zero for the township since it does not invest any money in the construction of new infrastructure. This can be observed in Table 34 under "outflow" and "total outflow". The incremental net property tax for the township is given by subtracting the net property tax obtained under the "without project" scenario from the net property tax obtained from the "with project" scenario. The $ 9,900 incremental net property tax is the cash flow used in Table 32 below to determine the net present value of the project given a 5 percent discount rate.

Table 32
Net Present Value of Infrastructure Investment for Lapeer Township

YEAR	INCREMENTAL NET TAXES	DISCOUNT FACTOR (5%)	PRESENT VALUE
1	9,900	0.95	9,424.80
2	9,900	0.91	8,979.30
3	9,900	0.86	8,553.60
4	9,900	0.82	8,147.70
5	9,900	0.78	7,761.60
6-50	9,900	13.18	130,482.00
		NPV	173,349.00

The net present value (NPV) of the project for Lapeer Township is $ 173,349. Such a positive net present value indicates that it is profitable for the township to execute the project. The economic incentive is represented by the discounted incremental net property tax of $ 9,900 the township receives during the 50-year life of the agreement

The City's Perspective

Inflows, total inflows and net benefits in the "without project" scenario are zero for the city. Table 35 in the Appendix provides all the relevant figures. Under the "with project" scenario the outcome is different. First, the inflow for the city is $217,325. This amount is obtained by multiplying the total taxable value of $24,724,162 of all firms established in the transferred land (old and new) by the 1997 city's millage rate of 8.79 mills. The outflows are represented by the one time infrastructure investment of $1,753,550[2] made by the city and the $37,086 yearly payment made to Lapeer Township according to the provisions of the contract. These two amounts add up and represent total outflows. The net property tax is negative in the first year of the project (-$1,536,311). However, such property tax is positive in subsequent years at $180,239. These two amounts also represent the incremental net property taxes needed to compute the present value of the project. The procedure is the same previously applied and explained in the township's perspective section above. Table 33 below shows the calculation of the net present value of the project for the city of Lapeer. The net present value (NPV) of the investment for the city of Lapeer is

[2] Assuming the infrastructure investment is paid for using property taxes collected. However, it is most likely that infrastructure improvements are paid for by hookup fees, readiness to serve charges and operating charges in which case the collected payment tax revenues are used to offset the costs of providing the full scope of municipal services (i.e. fire, police, etc.)

$1,521,829. Such positive figure indicates that the project is profitable and should be executed.

Table 33
Net Present Value of Infrastructure Investment for the City of Lapeer

YEAR	INCREMENTAL NET TAXES	DISCOUNT FACTOR (5%)	PRESENT VALUE
1	-1,536,311	0.95	-1,462,568.07
2	180,239	0.91	163,476.77
3	180,239	0.86	155,726.50
4	189,239	0.82	148,336.70
5	180,239	0.78	141,307.38
6-50	180,239	13.18	2,375,550.02
		NPV	1,521,829.29

The results of the financial analysis at the township and the city level indicate the project is profitable for both governments. However, attention is given to the fact that expenditures included in the analysis are only the cost of infrastructure investment and the revenue paid to the township according to the revenue sharing proportion agreed upon in the contract. Operational costs of the treatment plant, if large enough, could decrease net property taxes as to make incremental net property taxes negative during the life time of the project. If this is the case, the project should not be executed. Information on the operational costs of the treatment plant, and their inclusion in the calculation of the net present value, has the potential to present a more realistic and stronger case in the financial analysis.

Institutional memory about the reasons for and resulting action upon termination of P.A. 425 agreements becomes muddled as the time between contract execution and expiration lengthens. In this regard, especial attention is given to the number of contracts that mandate reversion of the transferred land to the original government upon agreement completion. Agreements of short duration (less than five years) may not be a problem. However, long term contracts have the potential to create significant public debate over the appropriateness of returning land area containing city funded public infrastructure improvements back to townships. Who bears the costs of the improvements? Will residents and business owners accept a changed status from city resident to township resident? One could argue that such a transfer would have associated high transaction costs.

The research encountered several problems in collecting data. Several factors played a role in shaping such outcome. Lack of cooperation from both firms and local units of government to provide the information requested is an important factor. Firms and businesses did not disclose the information for most of the time they considered such information was "sensitive" or "privileged". Local governments did not provide it due to either unwillingness to cooperate or lack of resources to do so. The case of Green Township is an example worth mentioning. Public officials at the township stated that to obtain the information requested, they would have to hire an engineering consulting firm to determine the extension and value of infrastructure built. This option was costly for the municipality to undertake. It is acknowledged that the data collection methods used, mail and phone interviews, were factors that contributed to collect both insufficient quality data. Personal contact through on-site interviews is suggested in future research

as these techniques have the potential to generate a better data set. Such an option may be more expensive. Another important factor affecting data collection and retrieval relates to institutional memory of local governments. Municipalities' institutional memory becomes blurred as time prolongs. Many public officials currently in office when asked about their P.A. 425 units' agreements expressed their lack of knowledge about the implemented agreements. This may explained by the fact that many officials were not in office when the contracts were executed. Such finding raises the question and possible outcome that as contracts become older, the original reasons for execution fade, leaving future research with fewer options or choices to investigate on the impact of the Act. Consequently, data collection continues to be a potential problem for future research regardless of the collection method selected.

The previous paragraphs convey the idea that the Conditional Land Transfer Agreement Act has been successful at providing an alternative to annexation. However, is the statute really accomplishing its intended objective of encouraging economic development?

Expansion and building of existing and new infrastructure, along with all the changes such expansion brings into the local economy, is a measure of whether the Act has accomplished its objective. The expansion of existing firms, along with the entering of new businesses, also pinpoints economic growth occurring in the land transferred. The city of Lapeer and the villages of Caseville and Rothbury reported expansion of existing firms after execution of P.A. 425 agreements (Table 14). Lapeer, Gaylord and Milan reported the establishment of new businesses and firms after agreement execution as well. These firms contributed to the local economy by creating new jobs and increasing

revenue tax bases. Nevertheless, most municipalities in the category of contracts "still in force" did not report any changes in economic development occurring in the area. Table 22 indicates that four out of seven governments surveyed did not experience any commercial development once contracts were implemented. This number represents 57 percent of the contracts in the research sample. From a public policy perspective, questions arise about the validity of P.A. 425 legislation if this percentage is indeed representative of all the 130 P.A. 425 contracts on file. Three out of seven municipalities indicated that infrastructure development had occurred after P.A. 425 agreement execution (Table 24). The literature review indicates that infrastructure availability (i.e. sewer and water) is a critical factor for economic development to occur. However, two important questions that derive from the previous finding are whether economic development actually follows infrastructure availability, and whether it is financially attractive for governments to engage in P.A. 425 agreements. In the former question, it is of paramount importance to determine whether P.A. 425 agreements are being used for specific projects, or if the legislation is being used as a broad base development tool similar to industrial parks. Needless to say, only further research can answer these questions.

APPENDICES

APPENDIX A

Summary of P.A. 425 Agreements Filed Since 1985

P.A. 425, 1984 – Text of Law

Date Executed	Units Involved	Purpose	Years	Revenue Sharing Agreement	Disposition At End Of Agreement
03/04/92	Adams T. & North Adams V.	Sewer, Water, Other	50	Township Levy	Reverts to Township
06/10/96	Adrian T & City of Adrian	Econ Dev, Housing Dev	50	1.5 mills	Transfers to City
07/19/94	Almont T. & Village of Almont	Economic Development	50	Township Levy	Transfers to Village
11/04/96	Alpine Charter T & Plainfield Charter T.	Econ Dev, Public Water	24	200 dollars per hydrant	Reverts to Township
03/27/89	Bagley T. & Gaylord City	Sewer, Water	5	Equivalent Township Levy	Reverts to Township. Rescinded 08/92
09/11/90	Bagley T. & Gaylord City	Sewer, Water	10	Township Levy	Reverts to Township. Rescinded 08/92
11/01/93	Beaverton T. & Beaverton City	Sewer, Water	20	Revenue that would be received - formula	Transfer to City
01/18/91	Benton Charter T. & Benton Harbor City	Sewer, Water, Other	50	Township Levy * SEV in Indus. Park	Reverts to Township
06/16/90	Berlin T. & Ionia City	Sewer, Water	7	2.0 Mills	Reverts to Township Unless Extended
04/13/91	Big Rapids Charter T. & Green T.	Sewer, Water	5	Big Rapids to make payments on Bonds issued	Reverts to Big Rapids T. Extended until 04/13/97
07/15/91	Big Rapids Charter T. & Plainfield Charter T.	Econ. Develop., Env. Protection	1	No Sharing Revenue Provision	Reverts to Big Rapids
09/01/96	Bingham T & City of St. Johns	Econ Dev, Water & Sewer	20	3 mills	Transfers to City
02/14/95	Bingham T. & St. Johns City	Sewer, Water	50	1.0 mills	Transfers to City
02/29/96	Brampton T & City of Gladstone	Economic Development	50	Tw millage rate	Reverts to Township
01/16/95	Brooks T. & Newaygo City	Economic Development	15	0.3 mills	Transfers to City
06/06/95	Buckeye T & Gladwin City	Sewer, Water	50	Real Property Tax * (Township mill/City mill rate)	Transfers to City
07/14/93	Buckeye T. & Gladwin City	Municipal Services	50	Revenue that would be received - formula	Transfer to City
10/09/96	Burlington T & Village of Union City	Economic Development	50	None	Reverts to Township
07/19/93	Carmel T. & Charlotte City	Sewer, Water, Other	10	1.0 Mills	Transfer to City
01/01/92	Carmel T. & Charlotte City	Sewer, Water, Other	10	1.0 Mills	Transfer to City
08/13/85	Caseville T. & Caseville Village	Water, Roads	12	50% Indus. Fac. Tax	Reverts to Township
01/21/97	City of Tecumseh & Tecumseh T	Economic Development	50	1.6 mills	Reverts to City
09/10/89	Clam Lake T. & Cadillac City	Sewer, Water, Refuse	50	1.0 Mills	Transfer to City
10/28/96	Coldwater T & City of Coldwater	Economic Development	50	Tw millage rate + .5 mills	N/A
04/12/96	Coldwater T & City of Coldwater	Econ, Ind, Residential Dev	50	1.6 mills	Transfer to City
05/04/95	Coldwater T. & Coldwater City	Econ. Dev, Env. Protection	50	Township mill rate + 0.5 mills of SEV	Reverts to Township
11/04/88	Coldwater T. & Coldwater City	Water, Sewer	50	1.5 Mills	Reverts to Township, Renewal Clause
03/20/90	Dundee T. & Dundee Village	Sewer, Water, Other	50	2.0 Mills	Reverts to Township, Renewal Clause
10/15/90	Easton T. & Ionia City	Sewer, Water, Fire	20	2.0 Mills	Reverts to Township
12/13/88	Easton T. & Ionia City	Water	50	50% of Revenues	Transfer to City
09/08/94	Eaton T. & Charlotte City	Economic Development	50	1.0 mills * SEV	Transfers to City
02/13/92	Eaton T. & Charlotte City	Municipal Services	10	1.0 Mills	Transfer to City
12/18/86	Elba T. & Lapeer City	Sewer, Water	50	1.5 mills	Transfer to City
06/18/96	Escanaba T & City of Gladstone	Economic Development	50	3 mills	Transfers to City
01/22/91	Fabius T. & Three Rivers City	Sewer, Water	50	Township Operating Millage + 0.5 Mills	Transfer to City Unless Renewed
04/12/95	Fabius T. & Three Rivers City	Sewer, Water	50	Township millage rate + 2.0 mills	Reverts to Township
05/04/90	Fabius T. & Three Rivers City	Sewer, Water	50	Township Millage + 0.5 Mills	Transfer to City Unless Renewed
01/22/91	Fabius T. & Three Rivers City	Sewer, Water	50	Township Operating Millage + 0.5 Mills	Transfer to City Unless Renewed
08/14/95	Fawn River T. & Sturgis City	Sewer, Water	15	1.5 mills	Transfers to City
11/23/88	Fayette T. & Hillsdale City	Sewer, Water	30	3 mills of SEV + 50% all state/federal revenue	Automatic 30 yr renewal or property reverts to Township
12/30/88	Flint Charter T. & Flint City	Airport Development	50	50% of Revenues	Reverts to Township, Renewal Clause
12/03/91	Fredonia T. & Marshall City	Municipal Services	50	2.0 Mills or 10.81% of City Levy	Reverts to Township
09/04/90	Garfield Charter T. & Traverse City.	Sewer, Water	50	Township millage rate, not higher 5.0 mills	Reverts to Township
08/10/94	Garfield T & Newaygo City	Economic Development	15	3/10 mill	Transfers to City
01/18/95	Garfield T. & Newaygo City	Economic Development	15	0.3 mills	Transfers to City
01/18/95	Garfield T. & Newaygo City	Economic Development	15	0.3 mills	Transfers to City
12/05/87	Genoa T. & Brighton City	Water, Sewer, Fire	50	2.5 Mills	Transfer to City
12/06/95	Girard T & Coldwater City	Economic Development	50	Tw millage rate + .5 mills	N/A

07/15/91	Grand Rapids Charter T. & Plainfield T.	Fire Eqp, Bld Insp	50	No Revenue Provision	Reverts to Grand Rapids Charter T.
12/21/92	Grant T & City of Clare	Org. Com. Services	20	1.0 Mills	Reverts to Township
07/01/92	Grant T. & Rothbury Village	Org. Com. Services	5	Township Levy	Renewable Up to 50 Yrs.
01/10/94	Grout T. & Gladwin City	Sewer, Water	50	Real Property tax * (Township mill/City millage rate)	Transfers to City
10/27/95	Handy T & Flowerville Village	Economic Development	30	2 mills	Transfers to Village
03/15/96	Hart T & City of Hart	Sewer and Water	30	Tw millage + 1 mill	Transfers to City
12/29/93	Hartford T. & Hartford City	Economic Development	20	Begin 2.4 mills * SEV, increases by factor 5% year	Transfers to City
05/11/93	Imlay T. & Imlay City	Sewer, Water	50	2.0 Mills	Reverts to Township
06/20/89	Imlay T. & Imlay City	Sewer, Water	50	Township Millage, 5.0 Mills Max.	Renegotiate at end of Contract
10/04/94	Inverness T & Benton T	Econ Dev, Env Protection	18	None	Reverts to Township
03/27/95	Ionia T & Ionia City	Economic Development	50	½ millage rate	Reverts to Township
11/28/89	Ionia T. & Ionia City	Sewer, Water	50	1.5 Mills + S/W Capacity	Transfer to City
03/29/85	Lapeer T. & Lapeer City	Water, Sewer	50	1.0 Mill	Transfer to City unless renewed
06/24/94	Lawrence T. & Village of Lawrence	Sewer, Water, other services	50	Revenue that would be received	Reverts to Township if agreement is not fulfilled
12/13/94	Lenox T & Richmond City	Commercial Development	6	1/12 ad valorem tax	Transfers to City
10/03/88	Leslie T. & Leslie City	Fire, Police, Sewer	30	1.0 Mills or Township Millage Levy	Revert to Township, Renewal Clause
05/08/95	Leslie T. & Leslie City	Sewer, Water	15	Township millage rate	Transfers to City
10/27/89	Lincoln T. & Standish City	Sewer, Water	50	1.5 Mills + S/W Capacity	Transfer to City
03/31/88	Lincoln T. & Standish City	Sewer, Water	50	70% Revenues	Transfer to City
09/28/90	Livingston T. & Gaylord City	Sewer, Water	5	Township Millage Levy	Reverts to Township Unless Renewed
12/17/96	Lockport T & City of Three Rivers	Econ Dev, Sewer, Water	50	2.5 mills	Transfers to City
03/21/90	Lockport T. & Three Rivers City	Sewer, Water	50	Township Levy + 0.5 mills	Transfer to City, Renewal Clause
03/20/90	Lockport T. & Three Rivers City	Sewer, Water	25	Township Operating Millage + 0.5 Mills	Transfer to City
06/02/92	Lockport T. & Three Rivers City	Sewer, Water	50	Township Operating + 0.5 Mills	Reverts to Township
05/16/88	Lockport T. & Three Rivers City	Sewer, Water	50	Township Millage Levy + .5 mills	Renegotiate at end of Contract
04/14/89	Lockport T. & Three Rivers City	Sewer, Water	50	Township Millage Levy + .5 mills	Renegotiate at end of Contract
06/02/92	Lockport T. & Three Rivers City	Sewer, Water, Other services	50	Township millage + 1.00 mills	Transfers to City
05/04/95	Madison Charter T & Adrian City	Economic Development	50	Township millage rate	Reverts to Township
03/15/90	Maple Valley T. & Brown City	Sewer	30	2.0 Mills	Transfer to City
06/03/91	Marengo T. & Marshall City	Municipal Services	50	2.0 Mills or 11.36% of City Levy	Reverts to Township
01/19/87	Marion T. & Howell City	Sewer, Water	50	1.28 Mills, 7.61% Revenues	Transfer to City
08/20/90	Marlette City & Marlette T.	Sewer, Water	40	$258 per year	Reverts to Township. (Rescinded 01/95)
08/08/94	Marshal T & Marshal City	Economic Development	50	2 mills or 11.36% property tax	Transfers to City
10/18/93	Marshall T. & Marshall City	Municipal Services	30	1.5 Mills 1st 5 yrs. 3.0 Mills After	Transfer to City
10/18/93	Marshall T. & Marshall City	Municipal Services	50	2.0 Mills or 11.36% Rev. (greater)	Transfer to City
12/27/90	Marshall T. & Marshall City	Municipal Services	50	2.0 Mills or 10.81% City Levy	Reverts to Township
07/21/92	New Buffalo T. & New Buffalo City	Economic Development	50	1.0 Mills	Transfer to City
09/25/96	Newark T & City of Ithaca	Economic Development	10	3 mills	Transfers to City
02/09/96	Newton T & Emmet Charter T	Econ Dev, Housing Dev	25	None	Reverts to Township
09/12/94	Otsego City & Otsego T.	Economic Development	1	No Revenue Sharing	Transfers to Township
10/24/94	Owosso T. & Owosso City	Industrial Development	25	3.0 mills	Automatically renewable 25 yr or reverts to Township
11/13/91	Perry T. & Perry City	Sewer, Water, Res. Dev	50	2.0 mills + 0.5 mill yearly in 92, 93, 94	Transfers to City
11/13/91	Perry T. & Perry City	Sewer, Water	50	2.0 Mills	Transfer to City
12/30/93	Perry T. & Perry City	Economic Development	50	1.0 mill 1994, increase 0.5 yearly until 98 * SEV	Renewable up 50 years or reverts to City
02/13/90	Pittsfield Charter T. & Saline City	Sewer, Water, Other	50	No Revenue Clause	Reverts to Township Unless Renewed
08/14/90	Pittsfield Charter T. & Saline City	Sewer, Water, Other	50	35% of Revenues	Reverts to Township Unless Renewed
12/30/92	Portage Charter T. & Houghton City	Economic Development	50	3 mills * SEV	Reverts to Township
12/30/92	Portage Charter T. & Houghton City	Economic Development	30	3 mills * SEV	Reverts to Township
12/06/88	Portland T. & Portland City	Sewer, Water	50	1.5 Mills	Reverts to Township, Renewal Clause
09/26/94	Resort T. & Petoskey City	Econ., Res., Commer. Dev	50	Township Levy * Revenue Generated Area 1	Renewable up 50 yr or reverts to Township
11/01/86	Richmond T. & Reed City	Sewer, Water	50	25% of Revenues	Reverts to Township, Renewal Clause

06/24/96	Sage T & City of Gladwin	Economic Development	50	Fraction (Tw millage/City Millage)	Transfers to City
11/18/91	Sheridan T. & Albion City	Sewer, Water, Other	50	Township Levy Not Less Than 4.0 Mills	Reverts to Township
11/18/91	Sheridan T. & Albion City (A)	Sewer, Water, Other	50	Township Levy Not Less Than 4.0 Mills	Reverts to Township (Renewal Provision)
11/18/91	Sheridan T. & Albion City (B)	Sewer, Water, Other	50	No Revenue Shared	Transfers to City
11/18/91	Sheridan T. & Albion City.(C)	Sewer, Water, Other	50	No Revenue Shared	Transfers to City
11/18/91	Sheridan T. & Albion City (D)	Sewer, Water, Other	50	No Revenue Shared	Reverts to Township
12/15/89	Sims T. & AuGres City	Sewer, Water	50	1.0 Mills	Transfer to City
08/08/90	South Arm T & East Jordan City	Economic Development	50	1 mill	Reverts to Township
12/28/94	South Haven Charter T. & S. Haven C.	Industrial & Residential Develop.	25	0.6787	Transfers to City
05/09/95	South Haven Charter T. & S.Haven C.	Ind. Dev, Env. Protection	25	0.6787	Transfers to City
10/24/88	St. Clair T. & St. Clair City	Sewer, Water	25	1.0 Mills	Transfer to City
07/24/95	Summerfield T. & Petersburg City	Sewer, Water, Econ. Dev	50	1.0 mill * taxable value real/personal property	Renewable up 50 yr or transfers to City
10/24/88	Swan Creek T. & St. Charles Village	Industrial Develop.	50	None	Reverts to Township. Contract terminated 10/94
12/18/95	Tecumseh City & Tecumseh T	Economic Development	50	None	N/A
04/08/96	Union T & Village of Union City	Economic Development	50	None	Reverts to Township
05/11/93	Utica City & Sterling Heights City	Water, Sewer	15	1.0 Mills	Reverts to Utica. Rescinded 06/96
10/16/89	Vernon T. & City of Durand	Economic Development	30	4 mills	Transfer to City
12/01/89	Vernon T. & City of Durand	Economic Development	30	4 mills	Transfer to City
12/01/89	Vernon T. & City of Durand	Economic Development	30	4 mills	Transfer to City
07/09/90	Vernon T. & Durand City	All City Services	50	Township Millage Rate, Max 4.0 Mills	Transfer to City
07/09/90	Vernon T. & Durand City	All City Services	50	Township Millage Rate, Max 4.0 Mills	Transfer to City
11/03/89	Vevay T. & Mason City	Sewer, Water, Roads	30	2.1 Mills 1st 7 yrs, 3.0 Mills After	Reverts to Township, Renewl Clause, Amend 04/20/95
11/03/89	Vevay T. & Mason City	Sewer, Water, Other	10	2.1 Mills 1st 7 yrs. 3.0 Mills After	Reverts to Township
12/04/89	West Branch T. & West Branch City	Water, Storm Sewer	50	3.0 Mills	Transfer to City
12/20/86	West Traverse T. & Harbor Springs City	NA	50	Township Millage Rate	Reverts to Township
11/28/86	West Traverse T. & Harbor Springs City	NA	50	1.5 Mills or Township Millage	Reverts to Township
01/11/94	Wheatfield T. & Williamstown T.	Sewer, Water	50	1/2 Wheatfield's property taxes on property	Renewable up 50 years or reverts to Township
06/21/94	Wilson T. & Boyne City.	Economic Develop. Sewer, Water	10	Township property taxes & personal property taxes	Automatically renewable 10 yr or reverts to Township
07/17/86	York Township & Milan City	Sewer, Water, Fire	50	15% Revenues	Reverts to Township, Renewal Clause
04/19/93	Zeeland Charter T. & Zeeland City	Sewer	50	User Fees	Reverts to Township
04/19/93	Zeeland Charter T. & Zeeland City	Water	50	User Fees	Reverts to Township

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INTERGOVERNMENTAL CONDITIONAL TRANSFER OF PROPERTY BY CONTRACT
Act 425 of 1984

AN ACT to permit the conditional transfer of property by contract between certain local units of government; to provide for permissive and mandatory provisions in the contract; and to provide for certain conditions upon termination, expiration, or nonrenewal of the contract.

History: 1984, Act 425, Eff. Mar. 29, 1985.

124.21 Definitions.
Sec. 1. As used in this act:
(a) "Economic development project" means land and existing or planned improvements suitable for use by an industrial or commercial enterprise, or housing development, or the protection of the environment, including, but not limited to, groundwater or surface water. Economic development project includes necessary buildings, improvements, or structures suitable for and intended for or incidental to use as an industrial or commercial enterprise or housing development; and includes industrial park or industrial site improvements and port improvements or housing development incidental to an industrial or commercial enterprise; and includes the machinery, furnishings, and equipment necessary, suitable, intended for, or incidental to a commercial, industrial, or residential use in connection with the buildings or structures.
(b) "Local unit" means a city, township, or village.
History: 1984, Act 425, Eff. Mar. 29, 1985;--Am. 1990, Act 22, Imd. Eff. Mar. 6, 1990.

124.22 Conditional transfer of property; period; written contract; renewal.
Sec. 2. (1) Two or more local units may conditionally transfer property for a period of not more than 50 years for the purpose of an economic development project. A conditional transfer of property shall be controlled by a written contract agreed to by the affected local units.
(2) A contract under this act may be renewed for additional periods of not to exceed 50 years upon approval of each legislative body of the affected local units.

124.23 Formulation of contract; factors.
Sec. 3. When formulating a contract under this act, the local units shall consider the following factors:
(a) Composition of the population; population density; land area and land uses; assessed valuation; topography, natural boundaries, and drainage basins; and the past and probable future growth, including population increase and business, commercial, and industrial development in the area to be transferred. Comparative data for the transferring local unit and the portion of the local unit remaining after transfer of the property shall be considered.
(b) The need for organized community services; the present cost and adequacy of governmental services in the area to be transferred; the probable future needs for services; the practicability of supplying such services in the area to be transferred; the probable effect of the proposed transfer and of alternative courses of action on the cost and adequacy of services in the area to be transferred and on the remaining portion of the local unit from which the area will be transferred; the probable change in taxes and tax rates in the area to be transferred in relation to the benefits expected to accrue from

the transfer; and the financial ability of the local unit responsible for services in the area to provide and maintain those services.
(c) The general effect upon the local units of the proposed action; and the relationship of the proposed action to any established city, village, township, county, or regional land use plan.

124.24 Public hearing; notice; majority vote required.
Sec. 4. (1) The legislative body of each local unit affected by a proposed transfer of property under this act shall hold at least 1 public hearing before entering into a contract under this act. Notice of the hearing shall be given in the manner provided by the open meetings act, Act No. 267 of the Public Acts of 1976, being sections 15.261 to 15.275 of the Michigan Compiled Laws.
(2) A decision to enter into a contract under this act shall be made by a majority vote of those members elected and serving on the legislative body of each affected local unit.

124.25 Compliance as condition to entering into contract; resolution; referendum; approval by majority of electors; petition; effect of not filing petition or adopting resolution.
Sec. 5. (1) A contract shall not be entered into under this act except in compliance with this section.
(2) If the governing body of a local unit involved in a transfer of property under this act adopts a resolution calling for a referendum on the transfer, the local unit may enter into the contract only if the transfer is approved by a majority of the electors voting on the transfer.
(3) If, within 30 days after a public hearing is held under section 4, a petition signed by 20% or more of the registered electors residing within the property to be transferred is filed with the clerk of the local unit in which the property is located, a referendum on the transfer shall be held in that local unit. If a majority of the electors voting on the transfer approve the transfer, the local unit may enter into the contract.
(4) If no registered electors reside within the property to be transferred and if, within 30 days after a public hearing is held under section 4, a petition signed by persons owning 50% or more of the property to be transferred is filed with the clerk of the local unit in which the property is located, a referendum on the transfer shall be held in that local unit. If a majority of the electors in the local unit voting on the transfer approve the transfer, the local unit may enter into the contract.
(5) If a petition is not filed or resolution is not adopted as provided in this section, the local unit may enter into the contract to transfer the property.

124.25a Violation of §§ 168.1 to 168.992 applicable to petitions; penalties.
Sec. 5a. Except as otherwise provided in this section, a petition under section 5, including the circulation and signing of the petition, is subject to section 488 of the Michigan election law, 1954 PA 116, MCL 168.488. A petition under section 5(4) that is signed by landowners because no registered electors reside within the property to be transferred is not subject to section 488 of the Michigan election law, 1954 PA 116, MCL 168.488. A person who violates a provision of the Michigan election law, 1954 PA 116, MCL 168.1 to 168.992, applicable to a petition described in this section is subject to the penalties prescribed for that violation in the Michigan election law, 1954 PA 116, MCL 168.1 to 168.992.

124.26 Contract; provisions.
Sec. 6. (1) If applicable to the transfer, a contract under this act may provide for the following:
(a) Any method by which the contract may be rescinded or terminated by any participating local unit prior to the stated date of termination.
(b) The manner of employing, engaging, compensating, transferring, or discharging personnel required for the economic development project to be carried out under the contract, subject to the provisions of applicable civil service and merit systems. An employee who is transferred by a local unit due to a contract under this act shall not by reason of the transfer be placed in any worse position with respect to worker's compensation, pension, seniority, wages, sick leave, vacation, health and welfare insurance, or any other benefits that he or she enjoyed before the transfer.
(c) The fixing and collecting of charges, rates, rents, or fees, where appropriate, and the adoption of ordinances and their enforcement by or with the assistance of the participating local units.
(d) The manner in which purchases shall be made and contracts entered into.
(e) The acceptance of gifts, grants, assistance funds, or bequests.
(f) The manner of responding for any liabilities that might be incurred through performance of the contract and insuring against any such liability.
(g) Any other necessary and proper matters agreed upon by the participating local units.

124.27 Contract; additional provisions.
Sec. 7. A contract under this act shall provide for the following:
(a) The length of the contract.
(b) Specific authorization for the sharing of taxes and any other revenues designated by the local units. The manner and extent to which the taxes and other revenues are shared shall be specifically provided for in the contract.
(c) Methods by which a participating local unit may enforce the contract including, but not limited to, return of the transferred area to the local unit from which the area was transferred before the expiration date of the contract.
(d) Which local unit has jurisdiction over the transferred area upon the expiration, termination, or nonrenewal of the contract.

124.28 Conditionally transferred property; jurisdiction.
Sec. 8. Unless the contract specifically provides otherwise, property which is conditionally transferred by a contract under this act is, for the term of the contract and for all purposes, under the jurisdiction of the local unit to which the property is transferred.

124.29 Other method of annexation or transfer prohibited.
Sec. 9. While a contract under this act is in effect, another method of annexation or transfer shall not take place for any portion of an area transferred under the contract.

124.30 Effect of filing contract; entering contract in book; contract as prima facie evidence of conditional transfer.
Sec. 10. The conditional transfer of property pursuant to a contract under this act takes place when the contract is filed in the manner required by this section. After the affected local units enter into a contract under this act, the clerk of the local unit to which the property is to be conditionally transferred shall file a duplicate original of the contract with the county clerk of the county in which that local unit, or the greater part of that local unit, is located and with the secretary of state. That county clerk and the secretary of state

shall enter the contract in a book kept for that purpose. The contract or a copy of the contract certified by that county clerk or by the secretary of state is prima facie evidence of the conditional transfer.

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APPENDIX B

Summary of P.A. 425 Agreements Filed Since 1985

Research Sample

Summary of P.A.425 Agreements Included in Research Sample

Date Exec	Units Involved	Purpose	Years	Revenue Sharing Agreement	Disposition end Agreement	Status of Agreement
03/27/89	Bagley Tw & City of Gaylord	Sewer, water	5	Equivalent Tw levy	Reverts to Tw	Rescinded 08/92
09/11/90	Bagley Tw & City of Gaylord	Sewer, water	10	Equivalent Tw levy	Reverts to Tw	Rescinded 08/92
06/03/91	Marengo Tw & City of Marshall	Municipal services	50	2 mills or 11.36% of city levy	Reverts to Tw	Rescinded 10/91
08/20/90	City of Marlette & Marlette Tw	Sewer, water	40	$285 per year	Transfers to Township	Rescinded 01/95
10/24/88	Swan Creek Tw & St. Charles Village	Ind. Development	30	None	Reverts to Tw	Rescinded 10/94
05/11/93	City of Utica & City of Sterling Heights	Sewer, water	15	3 mills or 20% tax revenue	Reverts to Utica.	Rescinded 06/96
06/16/90	Berlin Tw & City of Ionia	Sewer, water	7	2 mills	Reverts to Tw	Completed
04/13/91	Big Rapids Charter Tw & Green Tw	Sewer, water	5	Net revenues to make payments on bonds issued by Big Rapids	Reverts to Big Rapids. Extended until 04/13/97	Completed
08/13/85	Caseville Tw & Village of Caseville	Water, roads	12	50% of IFT	Reverts to Tw	Completed
07/01/92	Grant Tw & Village of Rothbury	Municipal services	5	Personal Prop. Tax to Tw, $1750 to Village	Reverts to Tw	Completed
09/28/90	Livingston Tw & City of Gaylord	Sewer, water	5	Ad valorem property taxes	Reverts to Tw unless renewed	Completed
09/12/94	City of Otsego & Otsego Tw	Econ. Development	1	No revenue sharing	Transfers to Township	Completed
11/04/96	Alpine Charter Tw & Plainfield Charter Tw	Water	24	$200 per hydrant	Reverts to Tw	Still in force
01/01/92	Carmel Tw & City of Charlotte	Municipal services	10	1 mill	Transfers to City	Still in force
07/19/93	Carmel Tw & City of Charlotte	Municipal services	10	1 mill	Transfers to City	Still in force
02/13/92	Eaton Tw & City of Charlotte	Municipal services	10	1 mill	Transfers to City	Still in force
03/29/85	Lapeer Tw & City of Lapeer	Sewer, water	50	1 1/2 mill	Transfers to City	Still in force
12/13/94	Lenox Tw & City of Richmond	Comm. Development	6	Ad valorem property taxes	Transfers to City	Still in force
11/01/86	Richmond Tw & City of Reed	Sewer, water	50	25% of revenues	Reverts to Tw	Still in force
07/17/86	York Tw & City of Milan	Sewer, water, fire	50	15% for Tw, 85% for City (ad valorem taxes)	Reverts to Tw	Still in force

APPENDIX C

Financial Analysis of Infrastructure Investment

P.A. 425 Agreement Executed between the City of Lapeer and Lapeer Township

03/29/85

Table 34
Financial Analysis of the Township

	Without Project						
	Year	1	2	3	4	5	6-50
Inflow	Taxes	13,593.00	13,593.00	13,593.00	13,593.00	13,593.00	13,593.00
	User Fees						
	Special Assessments						
Total Inflow		13,593.00	13,593.00	13,593.00	13,593.00	13,593.00	13,593.00
Outflow	Investment	0	0	0	0	0	0
	Treatment Plant						
	Operational Costs						
Total Outflow		0	0	0	0	0	0
Net Tax		13,593.00	13,593.00	13,593.00	13,593.00	13,593.00	13,593.00
	With Project						
	Year	1	2	3	4	5	6-50
Inflow	Taxes	23,493.00	23,493.00	23,493.00	23,493.00	23,493.00	23,493.00
	User Fees						
	Special Assessments						
Total Inflow		23,493.00	23,493.00	23,493.00	23,493.00	23,493.00	23,493.00
Outflow	Investment	0	0	0	0	0	0
	Treatment Plant						
	Operational Costs						
Total Outflow		0	0	0	0	0	0
Net Tax		23,493	23,493	23,493	23,493	23,493	23,493
Incremental Net Tax		9,900	9,900	9,900	9,900	9,900	9,900

Table 35
Financial Analysis of the City

		Without Project					
	Year	1	2	3	4	5	6-50
Inflow	Taxes	-	-	-	-	-	-
	User Fees						
	Special Assessments						
Total Inflow		-	-	-	-	-	-
Outflow	Investment	0	0	0	0	0	0
	Treatment Plant						
	Operational Costs						
Total Outflow		0	0	0	0	0	0
Net Tax		-	-	-	-	-	-
		With Project					
	Year	1	2	3	4	5	6-50
Inflow	Taxes	217,325.39	217,325.39	217,325.39	217,325.39	217,325.39	217,325.39
	User Fees						
	Special Assessments						
Total Inflow		217,325.39	217,325.39	217,325.39	217,325.39	217,325.39	217,325.39
Outflow	Investment	1,716,550.00	-	-	-	-	-
	Treatment Plant						
	Operational Costs						
	Revenue Sharing	37,086.00	37,086.00	37,086.00	37,086.00	37,086.00	37,086.00
Total Outflow		1,753,636.00	37,086.00	37,086.00	37,086.00	37,086.00	37,086.00
Net Tax		(1,536,310.61)	180,239.39	180,239.39	180,239.39	180,239.39	180,239.39
Incremental Net Tax		(1,536,310.61)	180,239.39	180,239.39	180,239.39	180,239.39	180,239.39

APPENDIX D

Survey Samples

SURVEY ON THE EFFECTS OF PA425 AMONG CONTRACTING UNITS OF GOVERNMENT
(Contracts Rescinded)

Conditional Land Transfer Agreement between:

_____and_____

Respondent Name_____Unit of Government_____

Position_____Phone Number_____

General Instructions: *For each question, record only one answer, unless otherwise stated. For questions with pre-coded responses, circle the respondent's answer and then write the pre-coded response number in the blank on the right side of the questionnaire. If the respondent is unable to provide an answer to the question, enter a -9 in the blank.*

I. BACKGROUND INFORMATION AND DEMOGRAPHIC ASPECTS.

1.1 Population _____

1.2 What is the land area of this unit of government? _____sq miles/acres

1.3 Land area of the parcel transferred? _____sq miles/acres

1.4 Operating Millage levied by this unit of government in 1998? _____

1.5 What was the length of the PA425 agreement? _____years

1.6 The reason(s) or purpose for the transfer of land as indicated in the agreement?

(3) Residential Development (4) Commercial Development

(5) Industrial Development (6) Other:_____

1.7 What specific public services were needed that prompted the contracting units to engage in the Conditional Land Transfer Agreement program?

(3) Sewer and water (4) Electric utilities

(5) Street/roads (6) Other:_____

II. CONTRACT STATUS.

2.1 Please Identify the **reason(s)** why the contract **was rescinded**?

2.1.1_____

2.1.2_____

2.1.3_____

2.1.4_____

2.1.5_____

2.2 Have your intergovernmental relations with the other party to the contract been altered in any way after the contract was rescinded?

(0) No (1) Yes

If no, go to question 2.4

2.3 How have you relations with the other party to the PA425 agreement been affected?

(1) Have deteriorated (2) Have improved (-9) Don't know

2.4 Would you engage in another PA425 contract? _____

(0) No (1) Yes (-9) Don't know

2.5 If you were to sign another PA425 contract today, would you make any changes to the contract?

(0) No (1) Yes

2.6 Please, list the changes you would make to the contract.

2.6.1_____

2.6.2 _____

2.6.3_____

2.6.4_____

2.6.5_____

2.7 **Prior** to the execution of the PA425 agreement, did the unit consider annexation as a condition of providing infrastructure extension (i.e. sewer, water, utilities) to the area?

(0) No (1) Yes

2.8 How did you know about PA425? _____

(1) Government institution (2) at work (3) newspaper/TV

(4) Educational institution (5) from a friend (6)Other:_____

We have finished the interview, I'd like to thank you for the opportunity and the time you have contributed to this research.

Thank you!!

SURVEY ON THE EFFECTS OF PA425 AMONG CONTRACTING UNITS OF GOVERNMENT
(Contracts Completed)

Conditional Land Transfer Agreement between:

_____and_____

Respondent Name_____Unit of Government_____

Position_____Phone Number_____

General Instructions: *For each question, record only one answer, unless otherwise stated. For questions with pre-coded responses, circle the respondent's answer and then write the pre-coded response number in the blank on the right side of the questionnaire. If the respondent is unable to provide an answer to the question, enter a -9 in the blank.*

I. BACKGROUND INFORMATION AND DEMOGRAPHIC ASPECTS.

1.1 Population _____

1.2 What is the land area of this unit of government? _____sq miles/acres

1.3 Land area of the parcel transferred? _____sq miles/acres

1.4 Operating Millage levied by this unit of government in 1998? _____

1.5 What was the length of the PA425 agreement? _____years

1.6 The reason(s) or purpose for the transfer of land as indicated in the agreement?

(3) Residential Development (4) Commercial Development

(5) Industrial Development (6) Other:_____

1.7 What specific public services were needed that prompted the contracting units to engage in the Conditional Land Transfer Agreement program?

(3) Sewer and water (4) Electric utilities

(5) Street/roads (6) Other:_____

II. INDUSTRIAL AND COMMERCIAL DEVELOPMENT.

2.1 **Prior** to the land transfer agreement execution, **was there** any commercial and industrial development in the transferred land?

(0) No (1) Yes

If yes, fill out the box below and answer questions 2.2 and 2.3, otherwise go to question 2.4.

Name of Firm	Industrial Dev.			Commercial Dev.			Contact Person Phone Number
	Light	Med	Heavy	Retail	Serv	Other	

2.2 Did the extension of municipal services into the transferred land result in expansion of existing firms?

(0) No (1) Yes

2.3 Was the transferred land incorporated into existing industrial parks?

(0) No (1) Yes

2.4 After the PA425 agreement was executed, were new firms or commercial enterprises established on the transferred parcel of land?

(0) No (1) Yes

If no, go to question 3.1

2.5 Indicate the name and type of new firms located on the transferred land **after** the PA425 agreement was executed.

Name of Firm	Industrial Dev.			Commercial Dev.			Contact Person Phone Number
	Light	Med	Heavy	Retail	Serv	Other	

III INFRASTRUCTURE DEVELOPMENT.

3.1 Was there any type of infrastructure development such as sewer, water, and other utilities on the transferred parcel **prior** to the execution of the agreement?

(0) No (1) Yes

If no, go to question 3.3

3.2 Please, specify the type of infrastructure, quantity, and approximate value.

Type of Infrastructure	Quantity (miles, linear feet)	Approximate Value ($ thousands)

3.3 **After** the PA425 agreement was implemented, did any infrastructure development initiate/occur on the transferred parcel of land?

(0) No (1) Yes

If no, go to question 4.1

3.4 Specify the type, extension, and approximate value of the infrastructure created **after** the agreement was executed.

Type of Infrastructure	Quantity (miles, linear feet)	Approximate Value ($ thousands)

IV. RESIDENTIAL DEVELOPMENT

4.1 **Previous** to the execution of the PA425 contract, was there residential development on the parcel of land transferred to the city/village?

(0) No (1) Yes

If no, go to question 4.3

4.2 Specify the type, number of units, and SEV of the residential development located on the parcel, **prior** to execution of the PA425 agreement.

Type of Residential Dev.	Number of Units	1998 SEV

4.3 Did residential development on the parcel transferred expand **after** the PA425 agreement was executed?

(0) No (1) Yes

If no, go to question 5.1

4.4 Please, indicate the type, number of units, and SEV of the residential development on the parcel transferred ***after*** the agreement was executed.

Type of Residential Dev.	Number of Units	1998 SEV

V. CONTRACT STATUS.

5.1 Was the contract renewed or extended upon expiration?

(0) No (1) Yes

If no, go to question 5.4

5.2 Did you make any changes to the provisions of the new PA425 agreement?

(0) No (1) Yes

5.3 Please, list the **changes made** to the new PA425 contract.

5.4.1_____

5.4.2_____

5.4.3_____

5.4.4_____

5.4.5_____

5.4 Please, list the **reason(s)** why the contract **was not renewed**.

5.5.1_____

5.5.2_____

5.5.3_____

5.5.4_____

5.5.5_____

5.5 Did the land revert to the township after the contract was completed?

(0) No (1) Yes

If no, go to question 5.8

5.6 Did you recover the value of the investment made in the infrastructure needed to provide the public services specified in question 1.7 (refer to question if necessary)

(0) No (1) Yes

5.7 Have your intergovernmental relations with the other party to the contract been altered in any way after the contract was completed?

(0) No (1) Yes

If yes, specify how?_____

5.8 **Prior** to the execution of the PA425 agreement, did the unit consider annexation as a condition of providing infrastructure extension to the area?

(0) No (1) Yes

5.9 How did you learn about PA425? _____

(1) Government institution (2) at work (3) newspaper/TV

(4) Educational institution (5) from a friend (6)Other:_____

5.10 Would you engage in another PA425 contract? _____

(0) No (1) Yes (-9) Don't know

We have finished the interview, I'd like to thank you for the opportunity and the time you have contributed to this research.

Thank you!!

SURVEY ON THE EFFECTS OF PA425 AMONG CONTRACTING UNITS OF GOVERNMENT
(Contracts Enforced more than 4 Years)

Conditional Land Transfer Agreement between:

_____and_____

Respondent Name_____Unit of Government_____

Position_____Phone Number_____

General Instructions: *For each question, record only one answer, unless otherwise stated. For questions with pre-coded responses, circle the respondent's answer and then write the pre-coded response number in the blank on the right side of the questionnaire. If the respondent is unable to provide an answer to the question, enter a -9 in the blank.*

I. BACKGROUND INFORMATION AND DEMOGRAPHIC ASPECTS.

1.1 Population _____

1.2 What is the land area of this unit of government? _____sq miles/acres

1.3 Land area of the parcel transferred? _____sq miles/acres

1.4 Operating Millage levied by this unit of government in 1998? _____

1.5 What was the length of the PA425 agreement? _____years

1.6 The reason(s) or purpose for the transfer of land as indicated in the agreement?

(3) Residential Development (4) Commercial Development

(5) Industrial Development (6) Other:_____

1.7 What specific public services were needed that prompted the contracting units to engage in the Conditional Land Transfer Agreement program?

(3) Sewer and water (4) Electric utilities

(5) Street/roads (6) Other:_____

II. INDUSTRIAL AND COMMERCIAL DEVELOPMENT.

2.1 **Prior** to the land transfer agreement execution, **was there** any commercial and industrial development in the transferred land?

(0) No (1) Yes

If yes, fill out the box below and answer questions 2.2 and 2.3, otherwise go to question 2.4.

Name of Firm	Industrial Dev.			Commercial Dev.			Contact Person Phone Number
	Light	Med	Heavy	Retail	Serv	Other	

2.2 Did the extension of municipal services into the transferred land result in expansion of existing firms?

(0) No (1) Yes

2.3 Was the transferred land incorporated into existing industrial parks?

(0) No (1) Yes

2.4 After the PA425 agreement was executed, were new firms or commercial enterprises established on the transferred parcel of land?

(0) No (1) Yes

If no, go to question 3.1

2.5 Indicate the name and type of new firms located on the transferred land **after** the PA425 agreement was executed.

Name of Firm	Industrial Dev.			Commercial Dev.			Contact Person Phone Number
	Light	Med	Heavy	Retail	Serv	Other	

III INFRASTRUCTURE DEVELOPMENT.

3.1 Was there any type of infrastructure development such as sewer, water, and other utilities on the transferred parcel **prior** to the execution of the agreement?

(0) No (1) Yes

If no, go to question 3.3

3.2 Please, specify the type of infrastructure, quantity, and approximate value.

Type of Infrastructure	Quantity (miles, linear feet)	Approximate Value ($ thousands)

3.3 **After** the PA425 agreement was implemented, did any infrastructure development initiate/occur on the transferred parcel of land?

(0) No (1) Yes

If no, go to question 4.1

3.4 Specify the type, extension, and approximate value of the infrastructure created **after** the agreement was executed.

Type of Infrastructure	Quantity (miles, linear feet)	Approximate Value ($ thousands)

IV. RESIDENTIAL DEVELOPMENT

4.1 **Previous** to the execution of the PA425 contract, was there residential development on the parcel of land transferred to the city/village?

(0) No (1) Yes

If no, go to question 4.3

4.2 Specify the type, number of units, and SEV of the residential development located on the parcel, **prior** to execution of the PA425 agreement.

Type of Residential Dev.	Number of Units	1998 SEV

4.3 Did residential development on the parcel transferred expand **after** the PA425 agreement was executed?

(0) No (1) Yes

If no, go to question 5.1

4.4 Please, indicate the type, number of units, and SEV of the residential development on the parcel transferred ***after*** the agreement was executed.

Type of Residential Dev.	Number of Units	1998 SEV

V. CONTRACT STATUS.

5.1 How would you rate your intergovernmental relations with the other party to the contract?

(1) Excellent (2) Good (3) Fair (4) Bad

5.2 Has the economic development of the transferred parcel been changed after the execution of a PA425 contract?

(0) No (1) Yes

If no, go to question 5.4

5.3 How would you say PA25 has affected the economic development of the parcel transferred?

(1) increased/accelerated (2) Nothing has happened (3) Decrease

5.4 Do you intend to renew the contract once it expires?

(0) No (1) Yes

5.5 How did you learn about PA425? _____

(1) Government institution (2) at work (3) newspaper/TV

(4) Educational institution (5) from a friend (6)Other:_____

5.6 Would you engage in another PA425 contract? _____

(0) No (1) Yes (-9) Don't know

5.7 **Prior** to the execution of the PA425 agreement, did the unit consider annexation as a condition of providing infrastructure extension to the area?

(0) No (1) Yes

We have finished the interview, I'd like to thank you for the opportunity and the time you have contributed to this research.

Thank you!

SURVEY ON THE EFFECTS OF PA425 ON COMMUNITY ECONOMIC DEVELOPMENT
(Only to be filled out by businesses)
Conditional Land Transfer Agreement between:

_____And_____

Recipient Unit of Government_____

Business/Firm _____Respondent Name_____

Position_____Phone Number_____

Date of Contract Execution_____

General Instructions: *For each question, record only one answer, unless otherwise stated. For questions with pre-coded responses, circle the respondent's answer and then write the pre-coded response number in the blank on the right side of the questionnaire. If the respondent is unable to provide an answer to the question, enter a -9 in the blank.*

I BACKGROUND INFORMATION

1.1 Please define the type of economic activity the business/firm is engaged in.

INDUSTRIAL			COMMERCIAL			RESIDENTIAL		
Heavy	Med	Light	Retail	Service	Other	Apart	Houses	Other

1.2 Was the firm established on the transferred parcel of land **before** the P.A. 425 agreement was executed?

(0) No (1) Yes

If no, go to question 1.6

1.3 Please indicate the number of employees, total payroll size, and annual amount of property taxes paid to the local government by the business/firm in the immediate tax year **before** the P.A. 425 agreement was executed.

	NUMBER/AMOUNT
Employees	
Total Payroll Size	
Property Taxes	

1.4 Did the execution of the P.A. 425 agreement result in expansion of the firm/business?

(0) No (1) Yes

If no, go to question 1.6

1.5 Was the firm established on the transferred parcel **after** the P.A. 425 agreement was executed?

(0) No (1) Yes

If no, go to question 2.1

1.6 Please indicate the number of employees, total payroll size, and annual amount of property taxes paid to the local government by the business/firm in the 1997 tax year.

	NUMBER/AMOUNT
Employees	
Total Payroll Size	
Property Taxes	

1.7 Did the firm receive any tax abatements in order to locate on the transferred parcel of land?

(0) Yes (1) No

II LOCATION DECISION FACTORS

2.1 Please name in order of importance (most important to least important) the factors that affected the business/firm decision to establish on the transferred parcel of land.

2.1.1_____

2.1.2_____

2.1.3_____

2.1.4_____

2.1.5_____

We have finished the interview; I'd like to thank you for the opportunity and the time you have contributed to this research.

Thank you!

Please return the questionnaire in the self-addressed envelope to Lynn R. Harvey/Alexander R. Quinones. 48 Agriculture Hall. East Lansing. MI. 48824-1039.

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