MICHIGAN STATE UNIVERSITY

Urban Policy Research Series

Fall 2008

Michigan State University

Center for Community and Economic Development

UNIVERSITY OUTREACH & ENGAGEMENT

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URBAN POLICY RESEARCH SERIES

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Michigan's Urban Core Mayors and Michigan's Higher Education Community
Working Together to Strengthen Our Communities

The Urban Core Mayors is a bipartisan, multi-regional coalition of thirteen central city mayors, intended to address areas of mutual concern and develop and implement an agenda for local and state policy for cities. Formed in 1992 through the leadership of former Detroit Mayor Dennis Archer and former Grand Rapids Mayor John Logie, the Urban Core Mayors work together for effective policy solutions to Michigan's urban problems. Through this group, mayors exchange information and ideas with peers about local policies and practices that have benefitted individual cities. Founding members include the mayors of Ann Arbor, Battle Creek, Bay City, Dearborn, Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, Pontiac, and Saginaw. These thirteen cities anchor metropolitan regions that collectively include more than eight million of Michigan's ten million residents.

Michigan's economic recovery will be closely related to our central cities' ability to overcome continuing social and economic challenges. To support local and state policy development for cities, the Michigan State University Center for Community and Economic Development, in partnership with the MSU Land Policy Institute's MI-HELP consortium, connected Michigan's core city mayors and legislative leaders with its finest urban scholars to address the critical urban policy issues facing our State. In 2007, policy research was commissioned on priority topics identified by the Urban Core Mayors.

The resultant Policy Series (attached) seeks to extend the knowledge, resources, and networking capacities of the Urban Core Mayors in order to generate solutions to the problems that plague Michigan's core cities and enhance the quality of life for Michigan's most vulnerable residents.

For more information on this partnership contact:
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The Urban Policy Research Series is the result of a partnership between elected leaders in local and state government and Michigan's higher education community. Special thanks to Faron Supanich for his leadership in coordinating this project, and Graham L. Pierce for preparing this report for publication.

The **Urban Core Mayors** is a bipartisan, multi-regional group established in 1992 to work together for local and state solutions to common problems facing Michigan's core cities. Urban Core Mayors members include the Mayors of Ann Arbor, Battle Creek, Bay City, Dearborn, Detroit, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, Pontiac, and Saginaw.

The **Bipartisan Urban Caucus** is a bicameral, bipartisan network of legislators, established in 1995 by legislators seeking to develop a state policy agenda to support the revitalization of Michigan's core cities.

The **Center for Community and Economic Development** is a Lansing-based unit of Michigan State University's Office of University Outreach and Engagement. Established in 1969 to initiate and support innovative problem-solving strategies to improve the quality of life in distressed communities throughout Michigan, CCED provides a multidisciplinary capacity to respond to the complex, interrelated issues of communities. In fulfilling its mission to engage university resources in support of Michigan communities, CCED has provided assistance and information to the Urban Core Mayors since 1993. For more information visit http://www.ced.msu.edu/

The **Michigan Higher Education Land Policy Consortium** (MIHELP) is a public-private, multi-university, inter-disciplinary partnership between Michigan State University, Wayne State University, Grand Valley State University, and Public Sector Consultants, headquartered at MSU's Land Policy Institute. Established in 2005 with generous support from the W. K. Kellogg Foundation, the mission of MIHELP is to help make Michigan's urban and metropolitan areas vibrant and successful communities by addressing the fundamental research and outreach void in urban and metropolitan issues in the State. For more information visit http://www.mihelp.org/

Section 1

Underinvestment in Capital Facilities of Michigan's Urban Schools: Dimensions of the Problem and State Policy Options

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Introduction

Stark disparities in the condition of public school facilities were highlighted in the 1954 *Brown v. Board of Education* challenge to segregation and the landmark 1971 *Serrano v. Priest* challenge to school funding inequality. Over the last decade, an extraordinary generation of fabulous school facilities has been built in suburban areas, while low-income children in central cities are left behind in outdated and often dilapidated structures. There is growing policy interest, nationally and within Michigan, regarding inadequate school facilities as an important education quality issue. Moreover, there is increasing awareness of the important role that school building quality plays in neighborhood and community revitalization.

Michigan's highly centralized system for funding school operating expenditures has greatly equalized revenue across local districts, but the funding of school capital facilities remains exclusively a local responsibility. School infrastructure in Michigan is financed primarily by local property taxes. Dramatic variations in property wealth across communities create large inequalities in local districts' ability to pay for school infrastructure. As a result, school facilities in many Michigan school districts are inadequate. Michigan's current system of school facility finance has generated unequal opportunities for students and unequal burdens for taxpayers. These problems, which are especially acute in the state's urban school districts, can be addressed with suitable state policy. Michigan is one of only a few states nationwide that does not offer any state aide for school facilities.

The State of Michigan has established high standards for student performance in the state's public schools. To meet these standards, students and schools must receive adequate resources and support. There is a strong ethical and legal basis for this claim. If the state demands that schools and students be accountable for meeting state standards on tests and other performance measures, then the state must be held accountable for providing the resources to enable them to do it. This includes adequate capital facilities.

This section addresses three research questions:

- What is the value of capital facilities in each Michigan school district and how does this vary by community characteristic?
- How big is the unmet need for capital spending?
- What policy options are available to meet the unmet investment need?

The section is organized as follows. First, we briefly summarize available literature on how school capital facilities matter for student and community development and review recent school finance litigation that addresses capital facilities. Following this, our empirical methods and data sources for measuring the value of capital facilities in Michigan school districts are described. We then present the results of our capital stock measures, including an analysis of variation in capital facilities across Michigan school districts. After this, we define adequacy in school facilities and estimate the capital investment needed to bring infrastructure in those Michigan districts with inadequate facilities up to an adequate standard. A variety of possible state policies to support school capital investment are evaluated. We conclude with estimates of the state revenue required to meet alternative facility standards under various criteria for district eligibility for state facility aid.

Why School Capital Facilities Matter

Most teaching takes place in school buildings and the quality of those facilities affects the ability of teachers to teach and of students to learn. School facilities represent a key dimension of the resources available to support teaching and learning. They affect student and teacher morale, comfort, health, and safety. A large body of literature examines the relationship between facility quality and student outcomes, and researchers are establishing compelling evidence of a link between the condition of school facilities and student achievement (Cash, 1993; Lemasters, 1997; Schneider, 2002). In the most rigorous study to date, Davis (2007) finds a significant positive relationship between the value of district capital stock and student performance on Michigan's MEAP exam in well-specified econometric models.

Many factors contribute to the quality of school facilities and in turn the quality of student and teacher life and educational outcomes. For example, poor indoor air quality and ventilation is widespread. It contributes to respiratory illnesses (e.g., mold, which can cause asthma) which in turn increases absenteeism and reduces student performance

(U.S. Environmental Protection Agency, 2000a; 2000b; Leach, 1997; Smedje & Norback, 1999). Research has also linked teacher morale and student outcomes to building heating and thermal control (Lackney, 1999; Lowe, 1990), classroom lighting (Benya, 2001; Jago & Tanner, 1999), and soundproofing to reduce ambient noise levels (Earthman & Lemasters, 1998; Lucas, 1981).

School capital facilities also matter greatly for the type of learning experiences that students have access to. The opportunity to work with modern technologies in schools is becoming ever more important to prepare students for emerging high-skill employment opportunities. Today students in relatively affluent Michigan school districts learn to use computer-controlled machine tools, computer-aided drafting and graphic art technology, state-of-the-art television studio equipment, and more. Learning opportunities such as these can stimulate students' interest, imagination, and career aspirations, but they are rarely available in less-affluent communities. Indeed, the deplorable conditions in the most neglected urban schools implicitly convey a hurtful message to students: "You are not worth the expense of building and maintaining a decent school."

Teachers represent the most important resource for any school, and teacher turnover is a major problem, particularly in schools serving low-income children. Several factors influence teachers' decision to leave their jobs, but recent studies have highlighted the significant role that the condition of school facilities play in these decisions (Buckley et al., 2005; Horng, 2005; Loeb et al., 2005). Teachers prefer to work in clean, safe, well-equipped, and even inspiring facilities. Other things equal, it is difficult to attract and retain top-notch educators to work in outdated, dilapidated, and uncomfortable facilities when other schools offer much more hospitable work environments.

School buildings also matter for neighborhood and community development. High-quality school facilities attract households to a community and help to sustain demand for its residential housing stock. Public investment to create attractive neighborhood schools can also stimulate private residential investment. It enhances community pride. Investment in urban school facilities would help to stem urban decline and suburban sprawl. Well-designed and utilized schools also represent a potent community resource as sites for recreation, the arts, community group meetings, and social networks. Unfortunately, these potential benefits of school facilities are presently realized to a far greater extent in relatively affluent Michigan communities than in urban areas where the objective need for such community resources is greatest.

Several recent court decisions have compelled states to improve school facilities in local districts attended disproportionately by students from low-income families. Some legal challenges turn on equity claims, namely the fact that low-wealth communities (based on taxable property value per pupil) have greatly inferior school facilities, despite taxing themselves at much higher rates than wealthier communities. As this section will show, these conditions appear to prevail in Michigan. Other challenges are based on the claim that the facilities provided for the education of students in some districts are inadequate to meet the outcomes required by the state. In at least 14 states, courts have directed improvements to funding for school facilities in response to litigation, and similar litigation is pending or in-process in several other states (Sciarra et al., 2006; National Access Network, 2007; Erlichson, 2001).

Methods

School Capital Data

The method we use to calculate the capital stock of school districts in Michigan relies upon the data that all government subdivisions are required to submit to comply with the Government Accounting Standards Board's (GASB) guidelines for the preparation of external reports. These guidelines are enforced through a mixture of state laws requiring local governmental units to prepare financial statements using generally accepted accounting principles and the individual audit practices of school districts. Each year, local government entities submit official audits to the state that report their overall fiscal health.

The GASB was organized in 1984 after an agreement between the Financial Accounting Foundation; the American Institute of Certified Public Accountants; the Government Finance Officers Association; the National Association of State Auditors, Comptrollers, and Treasurers; and the seven organizations representing state and local government officials (Government Accounting Standards Board, n.d.). The GASB is an independent, not-for-profit organization that is the official source of generally accepted accounting principles for all government entities and their subdivisions.

GASB Statement 34 outlines the requirements for reporting capital assets and depreciation. Our primary data come from the Capital Assets tables included in the 2004-2005 financial reports that each school district in Michigan submitted to comply with GASB Statement 34. We could not use the filings for two school districts because their reports did not explicitly show capital assets and depreciation for school buildings and we excluded charter school from the analysis. In the end, we used data for 550 of the 552 traditional public school districts in Michigan.

Other Data

Local school districts are the unit of analysis throughout our study. All data pertain to the 2004-2005 academic year, unless otherwise noted. The building cost deflators came from the website of the Bureau of Economic Analysis (BEA) at the U.S. Department of Commerce. Table 5.8.4A (found on the BEA website) contains the education building cost indices for 1929-1996 and Table 5.8.4B for 1997-2005 (Bureau of Economic Analysis, 2004; 2008). Data on the taxable value of real property and millage rates for capital expenditures were obtained from the Michigan Department of Treasury. Data on student characteristics and enrollment were obtained from the State of Michigan's Center for Educational Performance & Information (CEPI) website. Community characteristics data from the 2000 U.S. Census were obtained from the National Center for Education Statistics website.

Measuring District Capital Stock

In accordance with the GASB guidelines, we define the capital stock as school buildings and related infrastructure, including athletic facilities. We did not include the value of land in the calculation because it is not depreciated. In addition, we excluded furniture, equipment and vehicles, which are also reported in the Capital Asset tables in the financial reports. The GASB guidelines are based on historic cost. As each building was constructed, renovated, or modified, the expenditure was listed as a capital asset. Each year a small percentage of that expenditure was deducted and classified as depreciation. The school districts' annual financial reports show the accumulated expenditure as capital assets and the sum of the historic depreciation. We interviewed a number of accountants who had produced the GASB financial reports for school districts and they indicated that building expenditures were depreciated down to 20 percent of the original value using a straight-line depreciation schedule over 50 years. These assumptions can be found in the "Notes to Financial Statements" section of the financial reports.

The financial reports are based on historic cost, so there has been no adjustment for inflation in the raw data. To show these assets in 2005 dollars so that we can make comparisons across school districts, it is necessary to calculate an adjustment for inflation. This adjustment is complicated by the fact that the expenditures for the construction, renovation, and modification of school buildings in a district were made at different points in time. Therefore, any given financial report will consist of numerous expenditures at various points in their 50-year depreciation schedules.

To adjust the capital assets and depreciation for inflation, we calculate the average age of each district's capital stock, which we call the capital vintage. The linear nature of the individual depreciation schedules suggests a linear relationship between the sum of historical expenditure and the sum of depreciation. We use the ratio of depreciation to the sum of capital assets and depreciation (i.e., historic expenditure) to place the capital stock at some point along the 50-year timeline. While many school buildings are more than 50 years old, in no district was the average beyond the 50-year window. (Recall that it is not just new construction but also renovation and additions that go into the calculation.) We calculate this capital vintage factor, t, for each district i, as follows:

$$t = 2005 - \left[\left(\frac{50}{0.8} \right) \times \left(\frac{depreciation_i}{depreciation_i + capital_i} \right) \right] \tag{1}$$

Once we determine the vintage of each district's building capital, we use the New Education Buildings price index from the U.S. Department of Commerce to adjust nominal capital stock for inflation. Given t from Equation (1), the value of district i's capital stock in 2005 dollars is given by:

(2)
$$CapitalStock_i^{2005} = capital_i^t \times \left(\frac{bldg\_index^{2005}}{bldg\_index^t} \right)$$

Where:

$capital_i^t$ = Building capital shown in the 2005 GASB filing

$bldg\_index^{2005}$ = Building cost index for 2005

$bldg\_index^t$ = Building cost index for year t, where t is given by Equation (1).

Results

Inequality in Capital Facilities across Michigan School Districts

Our methods indicate that in 2004-2005, the total value of the capital stock for public schools in Michigan was approximately $31.2 billion. By way of comparison, that is about 2.3 times the 2004-2005 current operating expenditure for Michigan's public schools, $13.6 billion. The capital stock amounts to $19,220 per pupil enrolled in the public schools. In other words, the education of every student is supported by about $19,000 in school facilities.

Because Michigan offers no state funding for school facilities, school districts must rely on local property taxes to finance their facilities. As a result, the value of a school district's capital stock is highly correlated with the value of the taxable land in the district. The aggregate numbers in the previous paragraph hide a great deal of variation across districts. The highest valued per-pupil capital stock is found in Ishpeming, a 950-student district in Michigan's Upper Peninsula, with per-pupil capital assets of $98,971. In contrast, the Battle Creek school district has capital facilities worth $3,413 per pupil. In a number of very small school districts, the current per-pupil value of school facilities was even lower.

We analyze the patterns in the value of school capital stock across local school districts in Michigan in two ways. First, we evaluate the relationship between school district capital stock and district wealth, or ability to pay for school facilities. Under Michigan's system of local property tax financing of school facilities, school districts' ability to pay, or fiscal capacity, is determined by the taxable value of a district's property. In order to examine the correlation between fiscal capacity and school capital stock, we have grouped school districts according to their per-pupil value of taxable property. Second, we examine variations in capital assets by community type, namely, urban, suburban, and rural.

Table 1 shows the distribution of capital assets across school districts grouped into quintiles based on their per-pupil value of taxable property. The table shows dramatic differences across school districts in property wealth as well as per-pupil capital stock. As expected, the value of districts' capital stock is directly correlated with their property wealth. The richest 20% of the state's school districts have over four times the property wealth of the poorest 20%. As a result, students from districts in the richest quintile benefit from 48% more capital assets in their schools ($22,457) than students in the poorest quintile ($15,201).

Equally striking is the fact that the observed differences in capital stock across communities would be even larger if the residents in Michigan's poorest school districts were not taxing themselves at significantly higher rates than wealthier districts. The last column of Table 1 shows that the average debt millage rate in the poorest districts, the key measure of local "fiscal effort", is well over twice the average rate of the richest districts. With only a quarter of the fiscal capacity and over twice the fiscal effort, Michigan's poorest school districts have only two-thirds of the capital assets in their schools as do the richest districts.

For an alternative portrayal of inter-district variations in school facilities, we group Michigan's districts by community type. We define five classifications for school districts. Urban districts are those districts that the National Center for Education Statistics (NCES) classifies as serving large cities and mid-sized cities. Rural districts consist of those districts classified by NCES as outside a metropolitan statistical area (MSA) plus those within an MSA with a population density fewer than 20 people per square mile. We classify districts as suburban if they meet the following two criteria:

1. The NCES classifies them as "serving an MSA but not primarily its central city."

2. They have a population density greater than 20 people per square mile.

Table 1
Distribution of Capital Stock and Millage Rates by District-Taxable Value per Pupil

District-Taxable Value per Pupil Quintile	Number of Pupils	Taxable Value per Pupil*	Total Capital Stock (in Millions)	Capital Stock per Pupil*	Average Debt Mills*
1 (Low)	349,784	$76,547	$5,317	$15,201	8.293
2	223,973	$131,094	$4,008	$17,896	5.293
3	324,365	$161,154	$5,817	$17,933	4,741
4	396,038	$216,421	$8,667	$21,883	5.177
5 (High)	329,497	$325,742	$7,399	$22,457	3.515

* Pupil-weighted

The second criterion was necessary because MSAs follow county boundaries, which may include outlying rural areas. There were a few districts that the NCES classifies as urban (e.g., East Lansing and Dearborn), but that we placed in the suburban category. The suburban classification is further broken down according to the median home value based on the 2000 U. S. Census. A low-income suburb contains suburban districts with median home values between $32,500 and $75,000. A middle-income suburb comprises suburban districts with median home values between $75,001 and $170,000. A high-income suburb contains suburban districts with median home values above $170,000.

Table 2 shows the enrollment, capital assets, and fiscal data grouped by community type. Roughly one fifth of the school districts are classified as urban, another fifth are rural, and the remaining three-fifths are suburban districts. Low-income suburban districts are generally located adjacent to the urban core and possess many of the same socioeconomic characteristics as the central cities. About 60% of the students in the central cities and low-income suburbs are poor. Moreover, the median family income in both of these categories is less than half the level of the high-income suburbs. While some of the high-income suburbs are small residential enclaves, many are large and rapidly growing districts that have built some of the state's most elaborate school facilities in recent years.

Table 2
Distribution of Pupils, Capital Stock, and Millage Rates by Community Type

Community Type	Number of Districts	Number of Pupils	Taxable Value per Pupil*	Capital Stock (in Millions)	Capital Stock per Pupil*	Average Debt Mills*
Central City	15	292,208	$109,530	$3,857	$13,200	7.436
Low-income Suburb	21	43,790	$89,074	$816	$18,636	5.117
Mid-income Suburb	186	675,295	$189,017	$13,068	$19,351	5.120
High-income Suburb	35	269,133	$285,368	$6,975	$25,916	5.191
Rural	293	343,231	$178,017	$6,492	$18,915	4.608
State	550	1,623,657	$185,662	$31,208	$19,221	5.440

*Pupil-weighted

Patterns in fiscal capacity, capital stock, fiscal effort across district community types reinforce those observed in Table 1. The average per-pupil value of taxable property is relatively low in Michigan's central-city school districts and even lower in the state's low-income suburbs. Low-income suburban districts have an average per-pupil value of taxable property that is less than a third the level for high-income suburbs. There is a strong correlation between fiscal capacity and capital stock per pupil. The 15 central-city school districts have an average per-pupil capital stock of $13,200. In the 35 high-income districts, in contrast, each student's education is supported by almost twice the level of educational facilities that are available to students in the central cities. This is not a situation where a few small, wealthy communities are being compared to large urban districts; the high-income suburbs have over a quarter of a million students.

The inequalities across community types do not end with fiscal capacity and capital stock. Michigan's central cities are taxing themselves at an average rate that is 43% higher than the average rate for the high-income suburbs. If not for this higher tax effort, the quality of central city school facilities would lag even further behind the facilities in middle- and high-income suburban districts than they presently do.

Grouping school districts into large categories like those in Tables 1 and 2 hides a great deal of variation within each of those categories. Ten small districts have over a $1 million in taxable value per pupil whereas the ten poorest districts, which include Detroit, have less than $70,000 per pupil. Unfortunately, there are only about 400 students in the top ten; there are over 160,000 students in the bottom ten. Detroit also has the highest tax rate for school facilities in Michigan, at nearly 14 mills. Compare Detroit Public Schools, with $56,701 in taxable value per pupil, to the Birmingham School District, which has $523,7641 in taxable value per pupil. Birmingham has almost ten times the fiscal capacity of Detroit and as a result, the per-pupil value of the capital stock in Birmingham is $57,124 versus $14,475 for Detroit. Yet due to the high fiscal capacity in Birmingham, students in the district are able to enjoy these high-quality quality facilities at a cost to local taxpayers of less than three mills for school facilities.

In sum, our data show dramatic differences in the value of school buildings across local school districts in Michigan, and this variation in capital assets is closely associated with the distribution of local property wealth. The disparities in school buildings and facilities across Michigan's local communities are much greater than inter-district disparities in current operating revenues ever were. Moreover, this variation persists, despite the fact that citizens in low-wealth districts are taxing themselves at much higher rates on average than their wealthier neighbors.

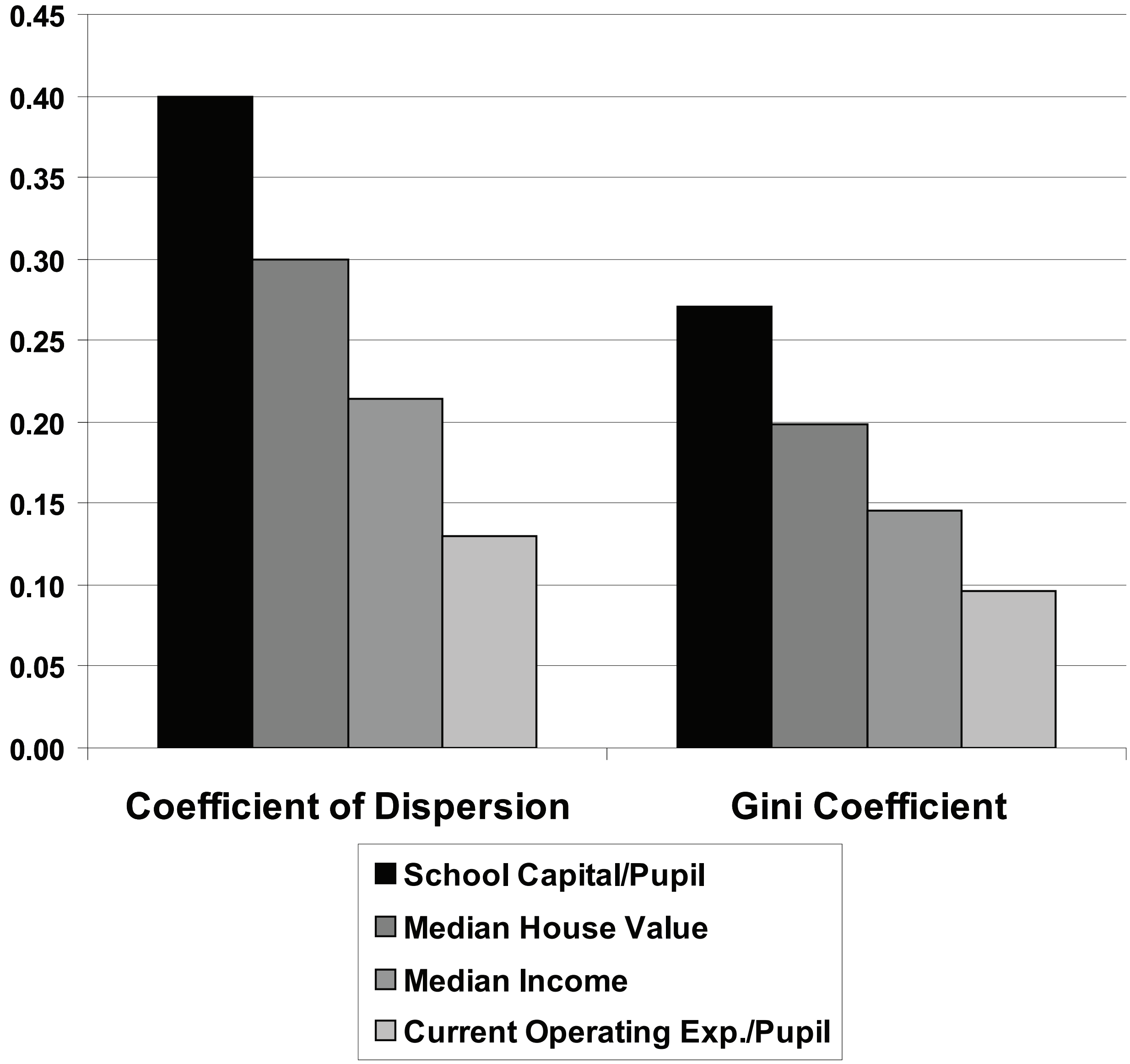
To provide further perspective, we examine how the degree of inequality in school capital across Michigan districts compares with the level of inequality in other indicators of community resources. The coefficient of dispersion and the Gini coefficient are two common measures of variation. Both measures range from zero to one with inequality increasing as the measure approaches one. Figure 1 shows the level of inequality of school capital assets across Michigan's local districts in relation to the inequality in other measures of community resources. Two of these measures, median family income and median home value, reflect private household resources. Compared to these measures of private resources, per-pupil current operating expenditures are much more equally distributed across Michigan districts. In this respect, school operating expenditures are equalizing relative to the distribution of private assets. On the other hand, the distribution of per-pupil school capital assets across local communities is more unequal than either family income or home value.

It is possible that Michigan's relatively equitable distribution of operating expenditures under Proposal A has had the unintended consequence of stimulating increased inter-district disparities in school capital facilities. Proposal A sharply curtailed districts' ability to raise operating expenditures (Arsen & Plank, 2003). Much like squeezing a balloon, however, this restriction may have produced a corresponding bulge elsewhere. In the case of school districts, that bulge has taken the form of expenditures for school facilities. School districts with high fiscal capacity and a strong preference for education cannot augment their operating expenditures, but they can build fabulous new facilities.

Estimating Unmet Capital Need

Despite the large number of court cases that include facilities in the definition of adequacy, there is currently no widely accepted definition of what constitutes adequate school facilities. In order to quantify unmet capital need for school districts in Michigan, we developed an operational definition of facility adequacy based on the cost of meeting prevailing standards of space per pupil. We define the adequate level of school building capital as the product of three variables: the prevailing norms for floor space per pupil, the number of pupils, and the cost per square foot to build in that county. Unmet capital need is defined as the expenditure that would be required to bring each district up to the adequate standard in 2005 dollars.

Figure 1
Equity Statistics for Michigan School Districts



Calculating the adequate level of capital. The Council of Educational Facility Planners International recommends 111.5 square feet per elementary student, 154.4 per middle school student, and 160.7 per high school student. Elementary school comprises six grades, middle school three, and high school four. Assuming that pupils are evenly distributed across grades and converting these to percentages, approximately 46.2% of students are in elementary schools, 23.1% in middle schools, and 30.7% in high schools. We used total pupil counts for each district, so the following formula was used to calculate the adequate square footage per pupil:

$$111.5\times(0.462) + 154.4\times(0.231) + 160.7\times(0.307) = 136.5 \text{ square feet per pupil} \quad (3)$$

Guidelines for building costs in 2002-2003 are available from the Michigan Department of Treasury's School Bond Loan Fund. We adjusted these figures for inflation using the same building cost indices that we used to calculate the capital and depreciation in 2005 dollars. For each district *i* in county *j*, the adequate capital stock is given by:

(4) $$AdequateStock_i = 136.5 \times pupils_i \times \cos t_j$$

Where:

$pupils_i$ = The number of pupils in district i in 2005

$$\cos t_j = \begin{cases} \$162.64 & j = 1 \\ \$151.27 & j = 0 \end{cases}$$

$$j = \begin{cases} 1 & Wayne, Oakland, Macomb, Washtenaw, Monroe, St.Clare, Livingston \\ 0 & Other \end{cases}$$

Calculating unmet capital need. For each district, unmet capital need is defined as the cost of bringing each district up to the adequate standard. That is, for each district, unmet capital need is defined as the difference between an adequate capital stock and the district's existing capital stock. Since both adequacy and the capital stock are calculated in 2005 dollars, the measure of unmet capital need for each district i is simply given by:

(5) $$Need_i^{2005} = AdequateStock_i^{2005} - CapitalStock_i^{2005}$$

Estimated need will be negative in those districts where the existing capital stock exceeds the adequacy standard. This could arise in situations where districts provide lavish facilities for their students, build excess capacity in anticipation of future enrollment growth, or experience sustained enrollment decline. There were 217 districts whose capital assets exceeded our adequacy standard, many by a significant margin.

Patterns in unmet capital need. The total unmet capital need for the state of Michigan in 2005 was approximately $7.6 billion. This amounts to about 24% of the total current capital stock. The unmet capital need is approximately $4,700 for every pupil enrolled in Michigan's public schools, or about $7,000 per student enrolled in only those districts with positive unmet need.

Table 3 shows the unmet capital need by school districts grouped by taxable-value-per-pupil quintiles. The average unmet capital need is inversely related to fiscal capacity. While unmet need is found in each quintile, it is highest in the lowest wealth districts. The average need of the poorest quintile is more than double the average unmet need in the richest quintile. The state's poorest 20% of districts have almost a third of all unmet need.

Table 3

Distribution of Unmet Capital Need Across School Districts by Taxable Value Quintiles

Quintile	Taxable Value per Pupil*	Capital Need per Pupil*	% of Total Statewide Need
1 (Low)	$76,547	$6,950	32.2
2	$131,094	$5,179	15.4
3	$161,154	$5,274	22.7
4	$216,421	$3,087	16.2
5 (High)	$325,742	$3,118	13.6

*Pupil-weighted

Table 4 breaks down unmet capital need by community type. Michigan's 15 central cities comprise about a third of all unmet need in the state. On a per-pupil basis, unmet capital investment need in Michigan's central city schools is over four times the unmet need in the state's high-income suburbs. There is also substantial need among the state's low-income suburbs, but they enroll a relatively small number of students, so their share of overall need is small. It is interesting to note that just over 20% of all statewide need can be found in just five districts: Battle Creek, Detroit, Flint, Muskegon, and Saginaw.

Enrollment growth in Michigan's high-income suburban districts surpasses that of any other community type. The unmet capital investment in these districts stems more from the necessity to expand school faculties to meet enrollment growth than from an inability or unwillingness to fund school infrastructure. As a result, we would expect this unmet need in more affluent districts to be transitory and capable of being resolved at the local level.

Table 4

Distribution of Unmet Capital Need Across School Districts by Community Type

Community type	Number of Districts	Taxable Value per Pupil*	Capital Need per Pupil*	% of Total Statewide Need
Central City	15	$109,530	$8,315	32.2
Low-income Suburb	21	$89,074	$6,321	3.7
Middle-income Suburb	186	$189,017	$4,354	38.9
High-income Suburb	35	$285,368	$1,945	6.9
Rural	293	$178,017	$4,026	18.3
Statewide	550	$185,662	$4,651	100.0

*Pupil-weighted

We now look at the relationship between unmet capital need and fiscal effort. Tables 5 and 6 show the current property tax rates (mills) levied on residents for debt associated with school capital facilities, along with the additional local mills that would be necessary to bring facilities up to an adequate standard. In order to calculate the additional mills required to finance the needed capital investment, we amortized the investment over 20 years at an annual interest rate of six percent.

Table 5

Millage Rates Required to Satisfy Capital Need in Michigan School Districts by Taxable Value Quintiles

Quintile	Capital Need per Pupil	Current Debt Mills	Additional Mills Required	Total Mills Required
1 (Low)	$6,950	8.293	7.468	15.761
2	$5,179	5.293	3.249	8.542
3	$5,274	4,741	2.692	7.433
4	$3,087	5.177	1.173	6.351
5 (High)	$3,118	3.515	0.787	4.302

Tables 5 and 6 clearly indicate why state action is needed, if Michigan is going to make serious progress in providing adequate school facilities for all students. Given our finding that districts with meager school capital assets tend nevertheless to have high local tax effort, it is hardly surprising that prevailing debt millage rates in districts with the greatest capital need are much higher than tax rates in districts with relatively little unmet need. As Table 5 shows, high current millage rates in the lowest-wealth districts do not begin to provide the resources that would be required to provide adequate facilities. Meeting the need for new capital spending in Michigan's poorest school districts would require voters to nearly double their already high millage rates, to almost 16 mills. Even if taxpayers in low-wealth districts were willing to tax themselves at these extremely high rates, they would be prevented from doing so because that rate exceeds the state's 14 mill debt limit. The wealthiest quintile districts, meanwhile, could finance their unmet need relatively easily, with an average increase in local property tax rates of less than one mill. Table 6 shows a very similar pattern in the additional mills required to attain adequate facilities among school districts grouped by community type. Michigan's central cities would have to increase their property tax rates by an average of 84%.

Table 6

Millage Rates Required to Satisfy Capital Need in Michigan School Districts by Community Type

Community Type	Capital Need per Pupil	Current Debt Mills	Additional Mills Required	Total Mills Required
Central City	$8,315	7.436	6.244	13.680
Low-income Suburb	$6,321	5.117	5.836	10.953
Middle-income Suburb	$4,354	5.120	1.894	7.014
High-income Suburb	$1,945	5.191	0.561	5.752
Rural	$4,026	4.608	1.860	6.468

Discussion

State Policies to Fund School Facilities

We have analyzed the reasons why the state should play a larger role in financing school infrastructure in Michigan's public school system and have presented evidence on the size of the problem that needs to be addressed. We turn now to consider a range of possible state policy options to increase the equity and adequacy of the way school facilities are financed in Michigan.

Most states are well ahead of Michigan on this count. Indeed Michigan is one of only eight states nationally that offers no state aid for school infrastructure.[1] Reviews of capital funding programs across the states indicate a very wide range of grant designs (Honeyman, 1990; Sielke, 2001; Wang et al., 2007). A few states provided funds for school infrastructure as far back as the early 20th century, but the number and scope of state programs has accelerated since World War II and particularly over the last two decades. Several conditions have pushed states to assume a greater role in funding school infrastructure. The most significant is school finance litigation. Facilities have been included in school funding adequacy cases in 37 states (National Access Network, 2007). Another impetus for state action in some cases has been the failure of local districts to expand school facilities fast enough to meet enrollment growth. States have also taken responsibility for assisting local districts to upgrade older buildings in order to incorporate modern technology, improve accessibility for the disabled, and to establish safe and healthy environmental conditions.

The attractiveness of various state policy alternatives will turn on the evaluation criteria employed. We focus on four criteria relevant for the design and evaluation of state programs to support school capital improvements. First, state policy should be responsive to variations in need across local districts and seek to ensure that all districts have adequate school facilities for their students. Second, state policy should promote taxpayer equity by offsetting disparities across communities in fiscal capacity (ability to pay) for school facilities. Third, state policy should be efficient in the sense that the cost of the program to state taxpayers is minimized by discouraging state support for capital expenditures that are extravagant or in districts with high ability to pay. Fourth, state policy should preserve the ability of local communities to express their preferences with regard to the quality of school facilities. It is evident that there will be trade-offs among these criteria. For example, the more children who are provided adequate school facilities through state financial support, the higher the program cost will be to taxpayers.

We provide a very brief overview of alternative state policy options and comment on how they rate against the evaluation criteria above. It is important to recognize that beyond the choice among these policy alternatives, policy makers would also need to address the question of what revenue instruments would be used to fund any expanded state role. We discuss the following options for state policy to support the provision school capital facilities:

- State Loan Programs
- State Financing of Selected Projects
- Matching Facilities Grants
    - Equalizing and Non-equalizing
- Lump-Sum Facilities Grants

  - Equalizing and Non-equalizing
- State Assumption of All Facilities Financing

These policy options are not mutually exclusive. Indeed, many states rely on a blend of multiple approaches.

State loan programs. State credit enhancement or state loan programs are distinct from all the other policy options listed. Essentially, these programs lower the interest rate at which districts can borrow funds for capital facilities either by using the state's credit-worthiness to guarantee bonds for district facilities or by giving bondholders first claim on some portion of the school aid going to the district in case of default. Michigan's School Bond Loan Fund is one example of this type of program. Although state loan programs lower borrowing costs for local districts, all capital expenditures must still be financed locally. Consequently, loan programs do not address variations in local districts' ability to pay, or ensure that minimal standards of facility quality are attained in all districts. As a result, loan programs are unlikely to address the underlying equity and adequacy problems in Michigan's system of school facilities financing. We turn, therefore, to consider programs that provide direct state aid to support capital investment by local districts.

State assumption of all facilities financing. At the opposite end of the spectrum from a loan program would be a system of full state funding of all school facilities. Hawaii maintains a statewide school system without local districts, and is the only state that fully funds all school facilities. A system of full-funding by the state could bring the schools all children attend up to adequate standard if new capital investment were targeted to districts with the greatest unmet need. The main drawback of full state funding in comparison to other policy options relates to its high cost to state taxpayers. State funding would be required to finance school capital in all districts, not just those with low ability to pay. Full-funding by the state could potentially address taxpayer inequity associated with variations in local district ability to pay. Taxpayer equity, however, would also likely require the state to assume the cost of servicing most outstanding debt that districts have incurred to pay for their existing facilities which would further increase the overall cost. Full-funding would most likely curtail the discretion of communities to establish facilities beyond an adequate standard and almost certainly diminish the expression of local community preferences for school facilities.

Matching facilities grants. Matching grants lower the price of capital projects undertaken by districts because the state pays for a certain percentage of project costs defined by the matching rate. Under a non-equalizing matching grant, the share of building costs paid by the state is uniform across districts. With an equalizing matching grant, the state's payment share is inversely related to district fiscal capacity.[2] An additional aspect of matching grant formulas turns on whether or not limits are placed on the amount of matching aid a district can receive (that is, are they closed-ended or open-ended matching grants).

Unlike state aid for current operations, state building aid programs in many states take the form of matching grants. Indeed, it is the most widely used type of grant to support school infrastructure. Twenty-three states use matching grants, while only six use lump-sum grants, and nine states use a combination of both (Wang et al., 2007). Moreover, in most states with matching facilities aid (24 out of 32), districts' matching rates incorporate equalizing components, usually based on local property wealth.

Matching grant programs satisfy the "local control" criterion, because they leave decisions about school capital investment to local voters. Non-equalizing matching grants do not generate taxpayer equity, and are inefficient in the sense that they require state taxpayers to subsidize capital projects in communities with high ability to pay. An appropriately designed equalizing matching grant would be preferable in that it could enhance taxpayer equity and minimize state subsidies to high-wealth communities.

The main drawback of matching facilities grants is that they do not assure adequacy in school facilities. An essential feature of matching grants is that they leave decisions about how much capital to provide to local districts themselves. If residents in districts with poor quality facilities choose not to raise additional revenue locally, despite the state subsidy, their school facilities will still be inadequate. Moreover, a substantial body of research on matching grants for current school operations indicates that these programs have largely failed to establish either equity or adequacy (Yinger, 2004; Odden & Picus, 2007). Given the scale of unmet capital need in Michigan's low-wealth communities and the fact that so many of these districts are already near their debt limits, it is extremely unlikely that matching grants alone could solve the problem.

Lump-sum facilities grants. Lump-sum aid can also be equalizing or non-equalizing with respect to local district fiscal capacity. Flat grants are non-equalizing lump-sum aid, since state aid is based on districts' enrollment, regardless of their fiscal capacity. Flat grants for school facilities are used in only a few states, including Arizona, Indiana, Kentucky, Mississippi, and South Carolina. For example, Indiana provides $40 per pupil to local districts to fund debt service. Kentucky and Mississippi provide other facility aid programs in addition to their flat grants. The key defects of flat grants are that they do not improve taxpayer equity nor assure adequacy unless the per-pupil grant is set at a high level. In that case, however, the program would be very expensive because it funds rich and poor districts alike. A flat grant sufficient to fund the unmet capital investment in Michigan's neediest districts would be highly inefficient, since districts with lavish facilities would receive the same per-pupil aid.

An equalizing lump-sum per-pupil grant has the potential to address a number of the problems noted with the other grants discussed thus far. Under an equalizing lump-sum grant, district state aid varies inversely with local fiscal capacity. Consequently, this type of grant can be designed to promote taxpayer equity and limit overall cost by minimizing (eliminating) state aid to districts with high fiscal capacity. In principle, an equalizing lump-sum grant program could be designed to provide sufficient revenue to finance adequate facilities in all districts. The most common form of equalizing lump-sum grants are the foundation aid programs used by many states, including Michigan, to fund school operating expenditures. Indeed the prevailing consensus among education finance scholars holds that foundation programs represent the most effective form of state aid to promote equity and adequacy in the case of school operating expenditures (Yinger, 2004). With a foundation program, policy makers set the foundation level, and typically also set a required tax effort as a condition for districts to receive state aid. Suppose the foundation level is set at a level sufficient to finance adequate facilities. A district's per-pupil state aid would be determined by the difference between this foundation level and the amount of revenue generated locally through the required tax effort. Districts with sufficiently high fiscal capacity receive no state aid, since the revenue they generate through the required tax effort surpasses the foundation level.

Local preferences and control can also be preserved under this type of grant by permitting local districts to levy discretionary mills to pay for levels of school capital that exceed the adequate level.

State financing of selected projects. Facility aid distributed as project grants deserves special consideration for a state such as Michigan where the prevailing distribution of school capital is very unequal and many children attend school in inadequate facilities. The state's neediest districts would benefit from a substantial up-front investment in their capital facilities, rather than a recurring (though uncertain) annual flow of state aid. The state could issue bonds to finance its investment and spread the repayment cost over many years. Under a program of state financing of selected capital projects, state aid could be targeted to districts with the greatest need and the lowest ability to pay, thus lowering overall cost. A key administrative challenge for project grant programs is the establishment of fair criteria for project selection. How does the state rank or prioritize capital projects?

The analysis in this section offers one possible set of guidelines that could be utilized to target and prioritize state funding of capital projects. Such a ranking system could be based on two criteria (1) district unmet capital investment need, and (2) district fiscal capacity. We now illustrate such a system and estimate the costs of alternative policy options.

Estimating the Cost of Alternative Policy Options for Michigan

Michigan offers a striking example of a state in which funding for school operating expenditures is highly centralized and relatively equal across districts, whereas the funding of school buildings remains exclusively a local responsibility. Michigan's reliance on this decentralized system of capital funding enables local communities to express their distinctive preferences for the physical features of the schools their children attend. On the other hand, it also produces a distribution of school capital across districts that measures poorly against standards of equity and adequacy. Michigan's current system of school facility finance creates very unequal opportunities for students and unequal burdens for taxpayers. Many Michigan students attend schools with inadequate facilities. It is difficult to imagine how serious progress in addressing these problems can be made without the state assuming greater responsibility for the finance of school infrastructure. Michigan's citizens and policy makers should also recognize that the state's current system of funding school facilities is vulnerable to legal challenge.

To help frame the evaluation of possible state policy options, we estimate levels of nonrecurring lump-sum aid (or alternatively state funding of selected capital projects) that would be required to attain different minimum capital facility standards in all of Michigan's school districts. For each of three minimum facility standards, we also show the cost of making eligibility for state aid conditional on various levels of local ability to pay (local taxable value per pupil). We assume that the state amortizes its investment in school infrastructure over 20 years at a six percent interest rate.

Table 7
Annual Revenues Required to Attain Alternative Facility Standards for Different Groups of Michigan School Districts

Districts Receiving Aid By District Taxable Value per Pupil Quintile	$14,000/Pupil Minimum Capital Stock	$16,000/Pupil Minimum Capital Stock	Adequate Capital Stock
Quintile 1 (Lowest Wealth Districts Only)	$33	$67	$200
Quintiles 1-2	$61	$111	$295
Quintiles 1-3	$97	$173	$436
Quintiles 1-4	$115	$204	$537
Quintiles 1-5 (All Districts)	$133	$232	$621

Figures are based on the assumption of amortizing the state's school facility investment over 20 years at 6% interest rate.

Table 7 displays the annual revenues required to fund a menu of alternative policy choices. For example, an investment of $1.6 billion would be needed to bring the infrastructure in every Michigan school district up at least $14,000 per pupil, which when amortized would require about $133 million per year to pay off. The required state revenue declines sharply, however, if facility aid is restricted to low-wealth school districts. If state aid is targeted to the lowest taxable value quintile, for example, the $14,000 per-pupil capital standard could be attained in these districts with an investment of $400 million or an annual payment or $33 million. Alternatively, if state facility aid were restricted to districts in the two lowest property-wealth quintiles, a state investment of $3.6 billion ($295 million annual payment) would bring all facilities in these districts up to adequacy. Finally, if the state were to finance all unmet capital need statewide without regard to district ability to pay, this would require an investment of $7.6 billion at an annual revenue cost of $621 million.

The revenue to fund any new public investment in school facilities could be obtained from state property, income, or sales taxes, or from a combination of these and other revenue sources. Income and property taxes, unlike sales taxes, have the important advantage of being deductible from the federal income tax. Consequently, the net cost to state taxpayers of raising additional revenue for school facilities from either a state income or property tax would be less than from the sales tax. The income tax has the additional advantage of being more closely tied to taxpayer ability to pay than the two other main taxes, and that is an especially important consideration given the significant increase in income inequality across Michigan households over the last two decades. By that standard, a graduated income tax would be better still.

Table 8
Statewide Property Tax Mills Required to Attain Alternative Facility Standards for Different Groups of Michigan School Districts

Districts Receiving Aid By District Taxable Value per Pupil Quintile	$14,000/Pupil Minimum Capital Stock	$16,000/Pupil Minimum Capital Stock	Adequate Capital Stock
Quintile 1 (Lowest Wealth Districts Only)	0.108	0.224	0.663
Quintiles 1-2	0.203	0.369	0.980
Quintiles 1-3	0.324	0.575	1.446
Quintiles 1-4	0.382	0.675	1.780
Quintiles 1-5 (All Districts)	0.440	0.769	2.060

For the sake of illustration, we assume that the revenue to fund the various facility aid options depicted in Table 7 is derived from a statewide property tax. Table 8 shows the millage rates that would be required to pay for each option. So for example, a millage rate of 0.1079 would be sufficient to raise the capital stock in the poorest quintile districts up to at least $14,000 per pupil. How much would this cost the average Michigan homeowner? The answer is about $6.00 per year.[3] Alternatively, 0.369 mills (or about $21 per year for the average homeowner) would be sufficient to pay for investments that would bring the capital stock in the poorest 40 percent of Michigan school districts up to at least $16,000 per student.[4] If the goal were to finance investment to establish adequate facilities in the poorest 40 percent of districts, this would require 0.9797 mills or an annual property tax payment of about $55 for the typical homeowner.

In recent years, the State of Michigan's structural budget deficit has made it difficult for policy makers to think creatively about new initiatives that promise high returns on public investment dollars. The state's structural deficit did not emerge overnight, nor will it be fully resolved in the short run. As policy makers work to reposition the activities of state government, both through shoring up the revenue system and reassessing expenditure commitments, new initiatives to support investment in school capital facilities in Michigan's most needy communities deserve serious consideration. Our analysis indicates that, at a very moderate cost to state taxpayers, significant progress could be made towards providing adequate facilities for Michigan children who, through no fault of their own, must spend their days in dilapidated and poorly equipped buildings. A state facility aid program targeted to low-wealth communities would improve school outcomes, help stabilize neighborhoods, and provide needed demand in construction and allied industries. It is surely one of the most promising forms of public investment available to state policy makers.

Notes

1. The other states without state school infrastructure funding programs are Louisiana, Missouri, Nevada, North Dakota, Oklahoma, Oregon and South Dakota (Sielke, 2002).
2. Guaranteed tax base programs are an example of equalizing matching grants.
3. The median valued home in Michigan is worth about $140,000. In Michigan, taxable value is no more than 50 percent of market value and for most property owners somewhat less. One mill represents one dollar of annual property tax payment for every thousand dollars of taxable value (i.e., a tax rate of 0.001). So one can simply multiply taxable value, expressed in thousands of dollars, by the millage rate to determine the annual tax payment. Further suppose, conservatively, that the taxpayer is subject to a 20% marginal tax rate on the federal income tax. Thus annual tax payment on the median valued home associated with a tax rate of 0.1079 would be $140 × 0.5 × 0.1079 × 0.8 = $6.04.
4. $140 × 0.5 × 0.369 × 0.8 = $20.66.

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Section 2

Creating a Policy Environment to Lift Working Families Out of Poverty

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Introduction

> Innovative ideas and initiatives that have produced the intended results elsewhere are welcome. They can be homegrown or stolen. Finding best practices elsewhere and replicating them is the art of "legitimate larceny". - Philip F. Mangano (United States Interagency Council on Homelessness, n.d.-b)

A recent report, *State of Michigan's Cities: An Index of Urban Prosperity*, claims that Michigan cities, whether they are benchmarked against other cities in the U.S. or in their own counties, are not doing well, and that this situation hurts the entire state's ability to rebound economically. High poverty rates in Michigan's core cities are one of the key reasons why the state finds it difficult to attract new business and investment. Simply put, "the limited attractiveness of Michigan cities hurts the state" (Michigan Higher Education Land Policy Consortium, 2007).

At the same time that poverty rates in Michigan's core cities are increasing, the resources available to local governments to deal with the social and economic ramifications of the increasing numbers of people in poverty are dwindling. State shared revenues are declining while the tax bases of Michigan's core cities are eroding (City of Grand Rapids, n.d.) How, then, can local government officials carry out their responsibility for sustaining and improving the quality of life of their cities' residents? Cities across the country are searching for answers to this question (U.S. Conference of Mayors, 2007), but the need to find answers is particularly acute in Michigan (Austin & Affolter-Caine, 2006). The good news is that municipal leaders around the country are not throwing up their hands; rather, they are developing innovative ways of using the tools at their disposal to creatively address these issues (Cunningham, Furdell, & McKinney, 2007).

As traditional state and federal sources of funding for poverty alleviation programs have been drying up, many municipal governments are creating strong partnerships with organizations such as local foundations, Neighborworks[1] housing services organizations, and Local Initiatives Support Corporation (LISC).[2] As Cunningham, Furdell, and McKinney (2007) have shown, city halls[3] around the country have used partnerships with these groups, separately or in conjunction with each other, to generate financial and programmatic support for poverty-alleviation initiatives, thereby leveraging their own increasingly limited resources to maintain and build capacity for this kind of work. Cities as diverse as Corpus Christi and Indianapolis have crafted distinctive poverty alleviation programs by leveraging partnerships with these and other kinds of organizations.

Michigan is especially blessed by the presence of many of the country's best national and community foundations, a legacy of its rich industrial past, and both LISC and Neighborworks currently operate in Michigan. However, there is much room for their work to be expanded and more closely tied with that of Michigan's city governments. This project will explore the experiences of cities in Michigan and elsewhere that have been successful in creating the kinds of partnerships that have greatly increased city hall's capacity to lift working families our of poverty. This exploration will not only result in a set of promising practices that Michigan's cities can draw upon, but also a set of recommendations for state and local level policies that, if enacted, would create the strongest possible environment for Michigan's city governments to create partnerships that both leverage and maximize their capacities to help working families rise above the poverty level.

Importance of City Halls in Changing Poverty Conditions

Cities have a broad range of municipal powers, capacities, and resources that city officials are using to address many kinds of inequalities and disparities at the local level. We use the term "city hall" to refer both elected and appointed officials and to their powers, capacities, and resources. City halls can draw on their unique charter responsibilities, legislative authorities, local strengths, and history to do this work. Local leaders realize that increasing equity is important not just because it's the right thing to do, but because in a global economy, they realize that their cities need to be attractive to potential investors. Thus, addressing issues of poverty becomes an economic development strategy for a city. In city after city, economic development directors and local elected officials speak about economic and community development as being completely intertwined (Cunningham, Furdell, & McKinney, 2007).

City halls are not necessarily funding and carrying out poverty alleviation programs themselves. Instead, they partner with other organizations in the city in very creative ways, adding their weight to the work of their partners. Typically, city halls identify the kinds of assets that they can bring to the table. These assets range from use of the bully pulpit to generate political will, to convening interest groups from various sectors of the community, to leveraging Community Development Block Grant (CDBG) dollars or infrastructure improvements.

As Charles Lyons[4] said, "We cannot wait for the state and federal governments to act. The primary focus for city leaders must be on what we can do in our communities and regions to begin to turn things around... For local elected officials, the challenge is to work locally and regionally while at the same time calling on other levels of government to fulfill their responsibility for making American a nation of, by and for all the people." This research uncovers the kinds of policies that can help Michigan's local elected officials meet this challenge.

Looking at Plans to End Homelessness (PEHs) as Windows into Examining City Hall's Involvement in Poverty Reduction

Addressing poverty is not a conventional role for Michigan cities or for cities around the country. Typically, counties, the state, or non-profit service providers take on this mission. Increasingly, however, city officials share Lyons' sentiment and recognize that they cannot afford to ignore poverty and inequity, but how to address these issues is not clear. Cities are reluctant to take the lead when other entities are charged to do this work. Core cities also lack the financial resources to take on programmatic responsibilities. Particularly in high poverty cities, the financial cost of any comprehensive poverty alleviation program is daunting. However, as we know from the experiences of cities around the country, it is possible for city halls to lend weight and authority, and even funding and staffing, to the efforts of community partners.

In this project, we looked at city hall involvement in creating and implementing 10-year Plans to End Homelessness (PEHs) as a way to understand city hall engagement with poverty reduction activities occurring in each of the core cities. We chose to use the homelessness plans because the Michigan State Housing Development Authority (MSHDA) has embarked on a campaign to end homelessness in Michigan[5] and, as a result, every county in Michigan committed to creating its own plan to end homelessness. Thus, the PEH is a common poverty alleviation tool in each of the core cities. In addition, the U.S. Department of Housing and Urban Development (HUD) requires that a consortium, typically a Continuum of Care (CoC), write the plan for each county, making the plan a perfect vehicle for studying how city halls interact with their community partners.

Homelessness is a particularly daunting problem for Michigan cities. According to MSHDA, in 2006 over 30,000 Michigan residents were homeless. Only about 10% of homeless people are characterized as "chronically" homeless, where they have been homeless for more than a year or have experienced homelessness multiple times over a several year timeframe. They tend to be disabled by addiction, mental illness, chronic illness, or disability, including developmental disabilities. Often the chronically homeless have histories of hospitalization, incarceration, or unstable employment. Studies have shown that this group consumes over 50% of the resources devoted to eliminating homelessness (emergency medical services, psychiatric treatment, detox facilities, shelters, and corrections). Housing these chronically homeless individuals will greatly free up resources to help the other 90% (United States Interagency Council on Homelessness, n.d.-a). This is why the PEHs emphasize "housing first" as a key strategy.

Our focus in this research is not on the content of the PEH or on ending homelessness per se, but, rather, on the nature of the involvement of city hall in addressing homelessness as a particular poverty problem. Homelessness has been a national issue since the early 1980s. The United States Interagency Council on Homelessness has been a proponent of local ten-year plans to end homelessness. These plans share common elements, including a "housing first" strategy, data collection, homelessness prevention (including supportive housing and discharge policies), and the development of more units of affordable housing (United States Interagency Council on Homelessness, n.d.-a). Given the multi-faceted nature of this issue, research has shown that to be effective, the plan must have broad support and participation from public, private, and non-profit sectors.

Given the state of Michigan's economy, Michigan's local governments have few financial resources that can be directly used to end homelessness. However, there are often other organizations within the community that can contribute dollars. Foundation support can be very important in the creation and implement of the PEH, and foundations are increasingly aware of the need for them to become involved with this issue. As Cassandra Benjamin of the Charles and Helen Schwab Foundation stated, "At a time when local, state, and national organizations as well as government agencies are converging toward a goal to end homelessness, the philanthropic community is well positioned to provide both strategic guidance and targeted resources to end homelessness in individual communities and across the country" (Charles and Helen Schwab Foundation, 2002, p. 2).

We have learned in previous research that city hall involvement lends weight to any community initiative and increases the likelihood of sustained action resulting from plans. This is echoed in a study conducted by the United States Interagency Council on Homelessness about what distinguishes great PEHs from good ones. They found that great plans were usually sponsored by mayors, county executives, or governors, and that plans that were developed by a broad consortium of interests, including local government officials, were better than those without official participation (United States Interagency Council on Homelessness, n.d.-b). Taking this as our starting point, this research assesses the various ways that city halls in Michigan are lending and can more effectively lend their weight to others' efforts and take a visible role in addressing issues of poverty.

Methods

This research employs a comparative method of analysis, with comparisons taking place in two ways. We compare the 13 Michigan core cities to each other on a variety of measures, and we compare these 13 Michigan cities with two non-Michigan cities: Indianapolis, Indiana and Corpus Christi, Texas. These two cities were chosen because (a) they are exemplary in the degree to which city staff and programs are connected to the efforts by the Continuums of Care to end homelessness, (b) the political and policy environments are, if anything, more conservative than Michigan's, and c) Indianapolis has a strong mayor system while Corpus Christi has a council/manager form of government, providing evidence that city hall can be greatly involved in homeless programming regardless of the form of government.

To determine the nature and extent of city hall involvement in planning and implementing a county's 10-year Plan to End Homelessness, we took several approaches. First, we examined the plans to end homelessness for every Continuum of Care area, except for Dearborn. We contacted the chairperson of the Continuum of Care in Wayne County, Jennifer Lepard, who told us that the plan covering Dearborn would be released this fall. Our goal was to determine the degree to which the city's involvement in the planning process was visible in the plan. We looked for indications of the city's involvement in the Continuum of Care, indications of the city taking an active role in carrying out action steps identified in the plan, and indications of particularly city staff or departments involved in the plan. In addition, we looked at which agencies within the county were named in the plan as either the plan's authors or lead agencies. Lastly, we looked to see if foundations were named in the plan as participants in the planning process, funders of the planning process, or funders of particular programs. We examined the PEHs in both Indianapolis and Corpus Christi using this same methodology.

A second approach to determining the connectedness of the city with the plans for ending homelessness involved examining each city's website. We chose this approach because increasingly, an organization's website reflects its work and priorities. The purpose of this approach was to assess the visibility of homelessness issues and initiatives and of the PEH. Here, we searched the website for the word "homelessness" and counted the number of hits, and we searched the website for the words "continuum of care" and counted the number of hits. Then we looked to see if any of these hits indicated a press release or speech concerning homelessness or the PEH. In addition, we looked to see if the consolidated plan was available on the website, if city programs to aid the homeless could be found on the website, and, finally, if the Plan to End Homelessness was either on the website or linked to it. The websites of Indianapolis and Corpus Christi were examined using these same criteria.

The third approach was to survey the chairs and coordinators of the Continuum of Care in each of the 13 core cities. The people surveyed typically came from a non-profit or non-city but governmental agency whose mission was integrally tied to serving the homeless. We asked them several questions to gauge the involvement of city hall in creating and implementing the plan. The questions asked respondents to characterize city hall's involvement in 11 concrete ways (see Appendix) in order to determine the various ways that city hall was involved with serving the homeless in general, and with the creation and implementation of the PEH in particular.

Taken together, these three approaches provide three different windows into understanding the role and visibility of city hall in combating homelessness in the community. As the data below will show, each of these windows produces a different view of city hall's involvement. The data also show that the perception, visibility and reality of city hall involvement can vary immensely. For many Michigan cities, simply aligning the perception, visibility, and reality of city hall involvement can strengthen the overall community's efforts to lift families out of poverty.

Results

Analysis of the Plans to End Homelessness

Table 1 presents the results of our analysis of the PEHs for each city, including Indianapolis and Corpus Christi. Because it was often difficult to locate the plans on city or county websites, most of the plans were located through the website of the National Alliance to End Homelessness.[6] Others were found through a Google search. The first column gives the city name. The second column is our qualitative assessment of city hall's involvement, based on the visibility of city hall in the plan. Very important to note here is that this measure is an indicator of the visibility of city hall's participation and not a measure of its actual participation. The third column indicates who is named as the author of the plan. While all of the plans are the responsibility of the community's Continuum of Care, each CoC chose its own method and a group to produce the plan. The third column shows the role of foundations as evidenced in the plan. What we were looking for was evidence that foundations had a role in either authoring or funding the PEH or its initiatives. The last two columns indicate the role of city hall and of county government in the plan as evidenced through specific mentions of each.

When looking through the PEHs as windows into city hall involvement, Ann Arbor and Detroit are the only two cities in Michigan that appear to have "high" levels of city hall involvement. In both cases, the mayor has been directly involved in the plan. In the case of Ann Arbor, the mayor was an author of the plan, and in the case of Detroit, the deputy mayor is named as the point person for the city's work with homelessness issues. Both cities have also dedicated significant resources to implementing the plan. In Ann Arbor, the city plans to build 80-100 units of affordable housing, and in Detroit, an entire staff position, the Homeless Coordination Manager, has been created and dedicated to developing and implementing the PEH.

Two cities are designated "medium," Grand Rapids and Kalamazoo. In Grand Rapids, the mayor co-chaired the plan's advisory committee, though no specific role for the city is mentioned in the plan. In contrast, in Kalamazoo, the city is listed as a lead entity in two of the plan's objectives but does not appear to have taken a lead role in the creation of the plan, even though they are represented in the CoC. Also of interest is the fact that Kalamazoo is the only city in which LISC had a visible role in creating or implementing the plan. The rest of the Michigan cities are designated as "low," because while the city is often mentioned as a target of advocacy, it is not a direct agent of change. In none of the "low" cities was the city listed as an author, a member of the advisory committee, or explicitly mentioned as a member of the CoC.

In cash-strapped communities, foundations are an important source of funding for new initiatives, such as are typically called for in PEHs. Only in three Michigan cities, Battle Creek, Detroit, and Grand Rapids, were foundations mentioned as actors in the plan. A plan in a fourth city, Saginaw, mentions foundation support for one initiative, the land bank authority, but does not give details as to the nature of its support or the type of foundation targeted. In several cities, the plans mentioned the need to involve foundations, or more generally, the philanthropic community in funding initiatives, but in none of these cities was the foundation mentioned by name or was there certainty about their engagement with homelessness issues.

Because of the role of county government in providing human services, one would expect that county government agencies would be much more involved as authors or agents of action steps in the plan. Indeed, this is true. In every plan, there is county involvement as authors or members of the advisory committee to the plan, and in eight of the cities the county is mentioned as an agent of implementation. Even so, four plans made no mention of county government as an agent in action steps or initiatives (Battle Creek, Bay City, Grand Rapids, and Kalamazoo).

Corpus Christi and Indianapolis are both rated "high" involvement cities. In both of these cities, not only was their city hall involved in the planning process, but they were leaders of it. City hall in Corpus Christi is actually the lead agency in the county's CoC and funded the development of the plan by a consulting group. A deputy mayor in Indianapolis was one of the leaders in the planning process there. Moreover, in both cities, city hall is mentioned throughout the plan as an agent of change. In Indianapolis, the plan is viewed as Mayor Peterson's plan. Corpus Christi's plan is being implemented through the department of community development and many of the initiatives are funded through a dedicated 1/8 cent sales tax.

Table 1

Evidence of City Hall's Involvement in Authoring and Implementing the Community's Plan to End Homelessness

City	City Hall Involvement*	Authors of the 10-Year Plan to End Homelessness	Role of Foundations as Evidenced in the Plan	Role of City Hall as Evidenced in the Plan	Role of County as Evidenced in the Plan
Ann Arbor	High	Plan is authored by the Washtenaw Housing alliance, which is comprised of 10 non-profits. The forward to the plan is written by the County Administrator, the mayors of Ypsilanti and Ann Arbor, and the chair of the County Housing Alliance.	None mentioned.	City plans 80-100 units of permanently affordable supportive housing.	Active involvement from 1996. County Administrator is on the Board of the Washtenaw Housing Alliance and wrote the forward to the Plan. County has also committed funding to the eviction prevention plan.
Battle Creek	Low	The Homeless Coalition, comprised of 40 Providers of Homeless Services and consumers, funders, city and county representatives.	W. K. Kellogg provided funding for the creation of the plan and set parameters for the systems approach to be used in the work.	None mentioned.	No role mentioned.
Bay City	Low	The Bay County Continuum of Care, comprised of a broad array of non-profits. A city staff person was on the infrastructure subcommittee.	None mentioned.	No specific responsibility assigned to the city or to a city agency, although the Bay City Housing Commission was a supporting organization for one objective.	No specific role mentioned.
Dearborn	N/A	N/A	N/A	N/A	N/A
Detroit	High	The Continuum of Care has 125 members. Plan authored by the chair of the Homeless Action Network of the CoC, Director of the Wayne County Department of Human Services, Chair of the Wayne County Human Services Coordinating Body, and Chair of the Detroit/Wayne County Community Mental Health Agency.	Local philanthropic organizations noted for demonstrated commitment in funding programs and initiatives to fight homelessness.	City created the Homeless Coordination Manager position dedicated to developing and implementing the PEH. Deputy Mayor named as the point person. City involvement mentioned throughout plan.	County mentioned throughout plan.
Flint	Low	Flint/Genesee County CoC, Department of Human Services, Community Mental Health, United Way, MSU, Metro Housing Partnership.	None mentioned.	None mentioned.	The plan has commitment and support of County Board of Commissioners, articulated through a resolution.
Grand Rapids	Medium	Grand Rapids Area Housing Continuum of Care. Advisory Committee co-chairs were the Mayor of Grand Rapids and the County Commission Chair.	Plan funded by 3 foundations, and foundation staff sat on the Advisory Committee.	None mentioned.	No specific role mentioned.

Analysis of City Hall Websites

Table 2 presents a snapshot of city hall's involvement in programs to end homelessness. If, indeed, websites convey the priorities and work of the organization, then we would expect that if issues of homelessness and connections to other organizations working on this issue are important, this importance should literally be visible on the website. We recognize that some of the websites are very sophisticated, and others are not. Indeed, 4 of the 13 cities have websites without search engines, making parts of the data gathering impossible for these cities. We also recognize that the sophistication of the search engines themselves may differ. So, while this may be an imperfect measure, it is still useful comparatively, both between Michigan cities themselves and between Michigan cities and the two non-Michigan cities.

The columns in the table provide specific indicators of embeddedness. We chose to look for the presence of press releases or speeches concerning homelessness on the website because these are indicators of city hall officials using their bully pulpits to support the work. An ability to find the consolidated plan on the website is an indication of the importance of housing programming and the seriousness of the city's efforts to provide affordable housing and other types of assistance to low and moderate income people. A link to the PEH indicates that city hall sees the work of the PEH as connected to the work of city hall. Similarly, finding information about city programming or initiatives concerning homelessness is another indication of city hall involvement in this work. The number of hits on the words "homelessness" and on "continuum of care" indicates the prevalence of conversations and reports about the issue. Similar to Table 1, the second column in this table provides an overall impression, based on all of the indicators taken together, of the embeddedness of homelessness as an issue for city hall.

No Michigan city has the PEH directly linked to the city's website. According to our analysis of Michigan cities, homelessness issues are most visible on Grand Rapids' website, suggesting that in Grand Rapids, addressing issues of homelessness is embedded in the way city hall does business. They have press releases on this issue, the consolidated plan is easily accessed, and mention of homelessness and the CoC can found on the website. Four Michigan cities have medium level visibility: Ann Arbor, Battle Creek, Flint, and Lansing. One reason for this visibility is that their websites have search engines that allow a visitor to access meeting minutes and documents pertaining to city official discussions of homelessness. All but Lansing have the consolidated plan on their website. Lansing, however, does have mention of one program addressing homelessness on its website, but none of the others do. Homelessness receives no, or very little, mention on the other Michigan cities' websites.

When compared to Corpus Christi and Indianapolis, Table 1 shows that no Michigan city appears to have embedded the PEH in the way it does business. Strong-mayor city Indianapolis has many of the mayor's press releases on homelessness issues accessible on its website. Even though community partners are the lead agents in virtually all initiatives and programs addressing homelessness, city hall keeps the issue and the work of partners visible at all times, thereby adding weight to the significance of the issue and the work. For example, a search on the Indianapolis website for the word "homelessness" results in 219 hits; Ann Arbor, the Michigan city with the highest number of hits, has just 13. Corpus Christi, a council-manager city, not only has the PEH on its website, but it also has yearly updates on progress made on of the plan's action steps. Homelessness as an issue and as a focus for city and intergovernmental programming is clearly visible on its website. Both Indianapolis' and Corpus Christi's websites convey a sense that poverty and homelessness are not only critical issues, but are being addressed through city action and the work of its partners.

Analysis of CoC Leaders' Perceptions of City Hall Involvement

Table 3 provides a different picture of city hall involvement in plans to end homelessness. It shows the impression of community partners of city hall involvement in the PEH. This table outlines a continuum of capacities that city hall has to add weight and legitimacy to the work of community partners in lifting families out of poverty. At the very least, the city council can endorse the work of the community partner. The next level of involvement is to participate in meetings about the issue. These two levels of engagement, endorsement and participation, indicate to the community partner that the work is important and connected to the priorities of the city. Contributing resources, whether it is time, staff, or dollars, is another level of involvement. Some of these resource investments come at a low cost to city and yet can be leveraged by city hall partners in various ways. Finally, incorporating community-partner-endorsed initiatives into the way city hall does business is yet another level of involvement. While creating new or changing existing programming is a structural and budgetary commitment to the work, it may be beyond the ability of some cities.

Community partners in eight of the cities characterize city hall as being very involved with the PEH. However, when the actual nature of the involvement is probed, there is a good deal of variation within even these eight cities in terms of the kinds of involvement. For example, in Dearborn, a city rated high by partners, city hall was only involved in working on elements of the plan and attending meetings. Compared to other cities, such as Lansing or Kalamazoo, where city hall was involved in virtually all of the aspects of planning and initiating programs, Dearborn looks like it should be rated lower. However, it could be that in Dearborn, the involvement of city hall officials were critical to the success of those aspects of the planning process or it could be that the expectations of city hall involvement vary across cities. Most likely, both are true. The point is, however, that in at least eight of Michigan's core cities, community partners working on issues of homelessness see city hall as a key partner in their work.

Table 2

Evidence on City Hall Website of City Hall Involvement in Ending Homelessness

City	Impression of Embeddedness	Presence of Press Releases or Speeches on Website	Consolidated Plan on the Website	Plan to End Homelessness Linked to City Website	Homeless Programs Visible on Website	# of Hits on "Homelessness" in City Website Search	# of Hits on "Continuum of Care" in City Website Search
Ann Arbor	Medium	No	Yes	No	No	13	1
Battle Creek	Medium	No	Yes	No	No	7	8
Bay City	Low	N/A	No	No	No	N/A	N/A
Dearborn	N/A	N/A	Yes	N/A	No	N/A	N/A
Detroit	Low	N/A	No	No	No	N/A	N/A
Flint	Medium	No	Yes	No	No	4	1
Grand Rapids	High	Yes	Yes	No	No	5	3
Jackson	Low	No	No	No	No	N/A	N/A
Kalamazoo	Low	No	Yes	No	No	0	0
Lansing	Medium	No	No	No	Yes	10	5
Muskegon	Low	No	Yes	No	No	3	0
Pontiac	Low	No	No	No	No	0	0
Saginaw	Low	No	No	No	No	1	1
Corpus Christi	Very High	No	Yes	Yes	Yes	43	17
Indianapolis	Very High	Yes	Yes	Yes	Yes	219	75

Table 3 also provides insight into the ways that city hall can partner to end homelessness. When looked at this way, we see a great deal of room for more engagement by city hall. Column 2 shows that only 8 of the 13 city councils in the core cities have endorsed the PEH, according to the knowledge of community partners. It is possible that city councils in some, if not all of the other five cities, have endorsed the plan, but did not do so in a way that the CoC partners heard about it, which means that the capacity to lift up the work of partners was not maximized.

Columns 3 and 4 shows the extent to which city hall officials participated in the creation of the plan by either helping to draft specific plan elements or attending meetings about homelessness. According to community partners in the CoC, in every city where officials helped to draft plan elements, officials also attended meetings about homelessness issues. In three of the cities (Flint, Jackson, and Pontiac), community partners report that city officials did neither.

Columns 5-7 push the nature of involvement a bit further by displaying the investment of resources into the PEH. These columns show whether city hall officials sponsored meetings about homelessness, financed the planning process, or devoted a staff position to some aspect of the PEH. Only 4 city halls (Ann Arbor, Detroit, Lansing, and Muskegon) sponsored meetings about homelessness, and these four city halls were among the six cities that devoted a staff position to supporting the PEH and/or its initiatives. Only three cities (Detroit, Grand Rapids, and Kalamazoo) actually financed a portion of the planning process.

Column 8, in many ways, most clearly indicates the presence or lack of a partnership between CoC members and city hall. The consolidated plan is a HUD requirement. These plans have to show how cities plan to use various HUD grants to help very low, low, and moderate income people. To be most effective, the consolidated plan should be linked to the PEH. The fact that in three of the cities (Pontiac, Jackson, and Flint), community partners said that the PEH was not incorporated into the city's consolidated plan indicates that the partners had no knowledge of city hall's programming related to homelessness. Not surprisingly, in each of these cities the community partner who completed the survey stated that the city was only "somewhat" involved in the plan. Once again, these data should not be interpreted as the city hall not having issues of homelessness in its plan; rather they indicate that city hall is most likely acting in isolation and not maximizing its capacities relative to partnerships to combat poverty.

Columns 9-11 show whether city hall has changed how it does business because of the PEH. Column 9 indicates whether city hall created new initiatives because of the PEH while column 10 indicated whether or not the plan was incorporated into existing initiatives. Column 11 shows whether new partnerships were formed because of the plan. Only two cities (Kalamazoo and Lansing) did all three of these things. Ann Arbor, Battle Creek, and Grand Rapids incorporated the plan into existing programs; and Battle Creek and Saginaw created new partnerships because of the PEH.

Column 12 shows whether city hall specifies ending homelessness as a goal. According to CoC partners, five cities (Ann Arbor, Grand Rapids, Kalamazoo, Lansing, and Muskegon) have done this. Not surprisingly, in all five of these cities, the council endorsed the plan and CoC partners characterized city hall has being very involved in the efforts of the CoC.

Table 3

Results of Survey with CoC Leaders on City Hall Involvement

City	Involved	Nature of Involvement										
		Endorsed	Planned	Met	Sponsored	Financed	Staffed	In City Plan	New Program	Existing Program	New Partners	City Priority
Ann Arbor	Very	X	X	X	X		X	X		X		X
Battle Creek	Very	X	X	X			X	X		X	X	
Bay City	Somewhat		X	X				X				
Dearborn	Very		X	X				X				
Detroit	Very		X	X	X	X	X	X				
Flint	Somewhat	X										
Grand Rapids	Very	X	X	X		X	X	X		X		X
Jackson	Somewhat											
Kalamazoo	Very	X	X	X		X		X	X	X	X	X
Lansing	Very	X	X	X	X		X	X	X	X	X	X
Muskegon	Very	X	X	X	X		X	X				X
Pontiac	Somewhat											
Saginaw	Somewhat	X	X	X				X			X	

Key

Involved: How involved has city hall been in the Continuum of Care?
Endorsed: The city council endorsed the plan.
Planned: City hall officials worked on plan elements during the creation of the plan.
Met: City hall officials attended meetings about homelessness issues.
Sponsored: City hall officials sponsored meetings about homelessness issues.
Financed: City hall helped to finance the planning process.
Staffed : City hall designated a staff position(s) to support the plan and/or its initiatives
In City Plan: Plan elements are incorporated into the city's consolidated plan.
New Program: City hall created new initiatives because of the plan.
Existing Program: City hall incorporated the plan into existing city hall initiatives.
New Partners: City hall entered into new partnerships because of the plan.
City Priority: City hall specified ending homelessness as a goal or priority of city government.

Summary of City Hall Involvement in Ending Homelessness

Table 4 displays the impression of city hall involvement as indicated by each of the three comparative analyses used in this research: the analysis of the PEHs (Table 1), the analysis of city hall websites (Table 2), and the analysis of the surveys with CoC leaders (Table 3). Only in Ann Arbor and Grand Rapids does a view through each of the three windows show the same thing. Community partners rated both cities as very involved, and each city scored a "high" and a "medium" in the other two measures of city hall involvement in ending homelessness. Detroit, one of the only two Michigan cities that scored "high" in the PEH analysis and received high marks from community partners could more fully maximize its capacities to add weight to this issue by making issues of homelessness more directly apparent on its website. Several other cities (Battle Creek, Kalamazoo, Lansing, and Muskegon) received high marks from their community partners, yet the other two windows showed a different picture. This suggests that city hall is more involved in these issues than is easily apparent to the public. In these cities, city hall could make much more effective use of its capacities to lift up the issue of homelessness, demonstrating the commitment that it clearly has to end homelessness.

Table 4
Comparison of the 3 Windows into City Hall Involvement with PEHs

City	Impression of Involvement from Analysis of the PEH	Impression of Embeddedness from Analysis of the Website	Impression of Embeddedness by Community Partners
Ann Arbor	High	Medium	Very
Battle Creek	Low	Medium	Very
Bay City	Low	Low	Somewhat
Dearborn	N/A	N/A	Very
Detroit	High	Low	Very
Flint	Low	Medium	Somewhat
Grand Rapids	Medium	High	Very
Jackson	Low	Low	Somewhat
Kalamazoo	Medium	Low	Very
Lansing	Low	Medium	Very
Muskegon	Low	Low	Very
Pontiac	Low	Low	Somewhat
Saginaw	Low	Low	Somewhat
Corpus Christi	High	High	N/A
Indianapolis	High	High	N/A

Discussion

Policies & Practices for Maximizing the Capacities of City Hall to Lift Families Out of Poverty

The very first thing city hall needs to do is to lift up issues of equity so that they are constantly part of the public's awareness. This can be done in multiple ways.

The mayor needs to be involved by…

- Using the bully pulpit
- Making speeches and writing news releases
- Being present at important events
- Writing the forward or preface to important community-created documents

The city council needs to be involved by…

- Formally endorsing community and city hall initiatives
- Being present at important events
- Being present at community meetings
- Making poverty reduction a priority of the city

In addition, city hall can change the way it does business by actively prioritizing poverty reduction as a city goal. Then, city hall can free resources to address issues of poverty.

Jointly, the mayor and city council need to…

- Commit to implementation of endorsed plans to reduce poverty
- Align city hall resources to aid in the implementation of endorsed plans
- Request periodic scorecards showing progress

City Hall needs to embed the work into the way it does business by…

- Making poverty reduction programs, plans, and community partner initiatives visible on city websites
- Ensuring city staff participation in poverty-reduction initiatives

- Using city hall resources to leverage community resources
- Creating accountability measures to record progress and diagnose shortcoming
- Reporting to the council and community regularly
- Updating the city's consolidated, strategic, and comprehensive plans to include poverty reduction priorities

State-level Policies that Would Create a Better Local Policy Environment for Lifting Families Out of Poverty

> Governors and state policy makers play a critical role in bringing together the diverse stakeholders from the public, private, and nonprofit sectors, all of whom are needed to create an integrated network of resources and protections necessary for low income families to save and acquire assets. (Hoffman, 2006)

After working with state and local officials in homeless policy academies across the nation, the U.S. Department of Health and Human Services produced a report outlining the challenges and best practices related to reducing homelessness, much of which focused on the role of states in this work (Hart et al., 2007). This report called for institutionalizing the reduction of homelessness as a policy goal, ongoing strategic planning, support and commitment from the governor, and the commitment of funds. When viewed from this perspective, the state of Michigan is a leader in creating a policy environment favoring local jurisdictions' involvement in reducing homelessness. The state of Michigan developed "Michigan's Campaign to End Homelessness." Four state-level agencies, the Michigan State Housing Development Authority, the Department of Human Services, the Department of Community Health, and the Department of Corrections, have committed to aligning some of their programs with the needs outlined in the sixty-plus local plans. MSHDA has made $13 million available for housing related initiatives in 2008-2009. These initiatives are focused on chronic homelessness, domestic violence, homeless youth, homeless families, and housing first. Expected outcomes from these initiatives include aligning the states's work with local plans and enhancing collaboration between local units of government, CoC's, community collaborative service providers, local businesses, and local philanthropic entities.

While $13 million for the entire state will not solve the homelessness problem, it could be leveraged better if the state intentionally created an environment where these kinds of collaborations could flourish. This is the kind of environment in which the capacities of city hall to lift families out of poverty could be truly maximized. In such an environment, incentives would exist for city halls and their partners to develop innovative strategies to tackle this issue. The state could provide mechanisms that enable local governments to better leverage the state's commitment to the issues by:

- Providing better estimates of the homeless population and sub-categories within this population that cities can use to establish need and secure funds from non-governmental sources
- Increasing funding for housing, services, and supportive planning activities through state-level partnerships between departments, developers, foundations, and other possible funders
- Creating new funding for housing and services by redirecting or targeting existing federal resources (e.g., using TANF dollars for housing-related programs)
- Funding a state-level housing trust fund
- Enabling local jurisdictions to create their own housing trust funds
- Creating "one stop" service centers for families and individuals who are homeless or at risk of homelessness (e.g., a family self-sufficiency center, such as in Arizona)
- Strengthening Workforce Investment Board programs geared toward employing homeless adults
- Finding ways to increase access to SSI and SSDI for homeless individuals
- Allowing city halls more of a formal role in workforce development and human service delivery
- Allowing dedicated funding sources identified for use in fighting poverty
- Creating a state discharge policy for those released from prison or other institutions
- Creating stronger anti-predatory lending practices
- Adopting regulatory guidelines for sub-prime and non-traditional mortgage products

Appendix: Survey of CoC Leaders (Community Partners)

The Michigan State University Center for Community and Economic Development, in partnership with the Urban Core Mayors, and the Michigan Higher Education Land Policy Consortium is conducting in-depth policy analysis on high priority topics in Michigan cities. As part of this initiative, we received a grant to develop a set of state and local policy recommendations that, if enacted, would create the strongest possible environment for Michigan's city governments to create partnerships that both leverage and maximize their capacities to help working families rise above the poverty level. To do this, we are exploring the ways in which city governments have been involved in both the planning and implementation of their county's 10-year Plan to End Homelessness. It would greatly help us if you would take a minute or two to answer the following two questions about the role of Pontiac's city government in addressing homelessness in Oakland County. Please reply with your answers to this email or kcunning@kzoo.edu.

1. How involved has city hall been in the Continuum of Care? (By city hall we mean city government officials, staff, and programs.)
___very ___somewhat ___not at all

2. What is the nature of the involvement of city hall officials and city hall departments in creating and implementing the ten year plan to end homelessness in your county? Please check any of the following that apply.
___ The city council endorsed the plan.
___ City hall officials worked on plan elements during the creation of the plan.
___ City hall officials attended meetings about homelessness issues.
___ City hall officials sponsored meetings about homelessness issues.
___ City hall helped to finance the planning process.
___ City hall designated a staff position(s) to support the plan and/or its initiatives
___ Plan elements are incorporated into the city's consolidated plan.
___ City hall created new initiatives because of the plan.
___ City hall incorporated the plan into existing city hall initiatives.
___ City hall entered into new partnerships because of the plan.
___ City hall specified ending homelessness as a goal or priority of city government.
___ Other ________________________________
___ Don't know

If you wish to add any other comments, please do so.

Notes

1. http://www.nw.org/network/home.asp
2. http://www.lisc.org/
3. By “city hall” we mean elected and appointed city officials, city department staff, and official city government agencies.
4. 2003 National League of Cities President, then council member of Arlington, Massachusetts.
5. http://www.michigan.gov/mshda/
6. http://www.endhomelessness.org/section/tools/communityplans/

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Section 3

Why Cooperate and for What Results? An Analysis of Local Cooperative Efforts to Manage Regional Growth in Michigan

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Introduction

Concerns about low density suburbanization or “sprawl” have resulted in tremendous recent interest in growth management strategies that do not just curb sprawl but also alleviate its negative consequences. Effective growth management strategies accomplish two predominant goals: they revitalize and strengthen urban cores, and preserve and protect rural open spaces. For these two complementary goals to be successful, however, urban revitalization and rural protection policies have to be coordinated across large areas, often spanning multiple political boundaries. Further, these complementary policies would be rendered moot if one urban community extends its infrastructure alongside another rural community, spurring growth in areas with prime farmland; if only one community enforces regulations to protect the water quality of a lake shared among three communities; if one community zones land for industrial use while the contiguous property in the adjacent community is zoned for residential use; and if one community attempts to incentivize compact development and open space preservation while the adjacent communities subsidize large scale subdivisions and strip commercial development.

These scenarios suggest that growth management strategies will not be effective unless implemented in a coordinated manner across multiple jurisdictions. In fact, recent literature has shown that the lack of cooperation and collective action among jurisdictions has fuelled sprawling development patterns; fragmented natural resources; and created social, economic, racial, and territorial inequality at the regional scale (Rusk, 1993; Lewis, 1996; Porter, 1997; Judd & Swanstrom, 1998). Further, there are compelling reasons to conclude that these development patterns are not sustainable environmentally, economically, or socially. Therefore, it is not surprising that discussions on growth management and sprawl first and foremost emphasize the importance of regional cooperation as the starting point to achieving sustainable land use patterns (Florida Governor’s Task Force, 1989; Innes, 1993; Downs, 1994; New Jersey Office of State Planning, 1997; Alexander, 1998; Porter, 1997; Lowery, 2000).

Michigan’s Institutional Context

“Regional cooperation” is not a new term in the lexicon of land use planning in Michigan. The state has had a long and arduous history of planning reform aimed at cooperation, especially when such reform has been initiated at the state level. More than 70 years ago, in 1934, the State Planning Commission was created to achieve integrated and coordinated land use planning in Michigan. This commission’s role was not only to coordinate substantive economic development, natural resource, and land use planning concerns across Michigan, but to also coordinate local, county-level, and regional planning and plan making processes. Fears of losing local autonomy and centralization led to this commission being disbanded in 1947. In 1975, Governor Milliken established a Special Commission on Land Use (SCLU), emphasizing the need for developing coordinated land use planning legislation in Michigan. He warned the legislature, “No area is more critical to improving man’s relationship with the environment than land use. Yet in no area is legislation more fragmented, standards less certain, and decisions more shielded from the people.” During this time, a report titled *Michigan’s Future Was Toda*y set forth an agenda to develop a coordinated state and local land use planning framework to remedy the land use trends of that period. Between 1974 and 1978, several different versions of state land use legislation were considered by the Michigan legislature. Most of the debate focused on local governments voicing their fear of losing local control should the bills pass and eventually stymied the passage of these bills.

Conversations on state-level planning and regionalism in Michigan would not be revived again until the early 1990s when the Michigan’s Environment and Relative Risk Report commissioned by Governor Engler listed the “lack of coordinated and integrated planning” as the greatest threat to Michigan’s environment and economy. Several other studies commissioned in the ‘90s echoed the findings from this report and highlighted the importance of regional planning in Michigan. More importantly, the activity in this period swung the momentum back in favor of having more discussions on planning in Michigan. The environment was ripe for Governor Granholm to convene the Michigan Land Use Leadership Council, a blue ribbon commission, to examine concerns about the environmental, social, and fiscal impacts resulting from suburbanization occurring throughout the state. The council prepared a report premised on notions of smart growth and sustainable development. Not surprisingly, the report paid considerable attention to regional cooperation, emphasizing the urgency of the needed comprehensive reforms to make cooperation viable in Michigan.

Taken altogether, all of these efforts and reports reach a few key conclusions: First, land use, economic, and environmental issues do not follow political boundaries and therefore should be addressed at a larger metropolitan or regional scale. Second, Michigan’s fragmented local government structure and the patchwork quilt of land use policies are creating a checkerboard of development patterns where little attention is paid to the long term sustainability of natural resources and liveability of urban spaces. Third, Michigan's home rule tradition is a tremendous impediment to regional planning and cooperation. Fourth, mandates, incentives, and guidelines for regional cooperation are visibly absent in Michigan. Despite these conclusions drawn over more than 70 years, there is much we do not know about the status of regional planning in Michigan.

Models of Planning Reform

State-level land use planning, growth management, and intergovernmental cooperation strategies in the United States can be broadly divided into coercive strategies, incentive-based strategies, and permissive strategies. In states with coercive land use policies, compliance to state mandates is typically achieved through sanctions. State and/or regional agencies have monitoring, coordination and enforcement roles. Comprehensive plans are mandated, and in some states even the broad content of plans is specified by the state. In the incentive-based states, local compliance to state directives and goals (presumably encouraging regional cooperative and statewide land use planning) is encouraged through both direct and indirect financial and policy incentives. Comprehensive planning is often not mandated, but if communities choose to plan, a minimum content of plans is specified. Similarly, cooperation is not mandated, but informal communication channels are set up to provide opportunities for collaboration. In the states with permissive land use policies, neither comprehensive planning nor the content of plans is mandated (or only minimally so, if localities choose to plan, as is the case in Michigan). Incentives for cooperation and planning are rare.

With regard to cooperation in permissive states, typically, any administrative function that can be undertaken by a single unit of government can be performed jointly by multiple governmental units. In other words, local governments are permitted to engage in a wide variety of cooperative activities should they choose to. Substantive legislation permitting different land use policies such as Purchase of Development Rights (PDRs) and Transfer of Development Rights (TDRs), however, might be lacking. In the planning tradition, states with some level of land-use powers at the state government level (mandates and/or incentives) have been typically regarded as the more progressive states with regard to regional planning and cooperation.

Michigan is prototypical of a permissive state. In Michigan, local governments do not feel the "push" from the state to plan or cooperate. Further, there are very limited state-sponsored and institutionalized channels for cooperation – much of the ensuing planning and cooperation therefore should be explained by "other" factors particularly relating to local decision making. This institutional context places Michigan at the center of debates on whether regional cooperation around land use issues can evolve without state involvement (without state mandate or extensive state incentives). This makes Michigan an interesting context within which to study local government cooperation.

This research project has two aims: First, to document and analyze the extent of cooperation on land use planning and zoning issues in Michigan; and second, to examine the factors that shape decision makers' preferences to engage in land use cooperation.

This study evaluates three factors affecting cooperation. First, there is tremendous interest in the literature in understanding whether state mandates and formal institutions such as county and regional agencies foster cooperation among local decision makers (Olson, 1971; Hayek, 1973; Axelrod, 1984; Taylor, 1987; Young, 1989; Ostrom, 1990; Axelrod, Riolo, & Cohen, 2001). This study examines the impact of county and regional planning agencies on local government cooperation with regard to land use issues. Second, scholars have emphasized the influence of environmental factors such as changing economic and technological conditions (Coe, 1992; Huggins, 1992), shrinking revenues (Ehrenhalt, 1995), and deterioration of natural resources (Demsetz, 1967; Libecap, 1989) on local decision making (Goggin et al., 1990). This study analyzes how several environmental conditions affect cooperation on land use issues. Third, informal institutions such as norms and conventions contribute to the culture of a community or region (North, 1990; Putnam, 1993). Informal institutions could make the difference between cooperative efforts that are palatable and acceptable versus those that might be utopian and unrealistic in any given locality. These institutions set ground rules for interactions between groups of decision makers. This study evaluates the effect of several informal institutions on local cooperation.

Methods

This study was conducted using three different mail and Web-based surveys and several in-person interviews with elected officials. The first survey was sent to a random sample of 600 municipalities (cities, townships, and villages). 32% of these municipalities responded to the survey. Of those who responded, 68% were from townships, 11% from villages, and 21% from cities. The second survey was sent to a census of county planning departments in Michigan. 25% of the county planning departments responded to the survey. The third survey was sent to a census of regional planning agencies (RPA). 50% of the regional agencies responded to the survey. The in-person interviews were conducted with elected officials from selected case-study communities that are currently engaged in cooperative planning and zoning efforts.

Results

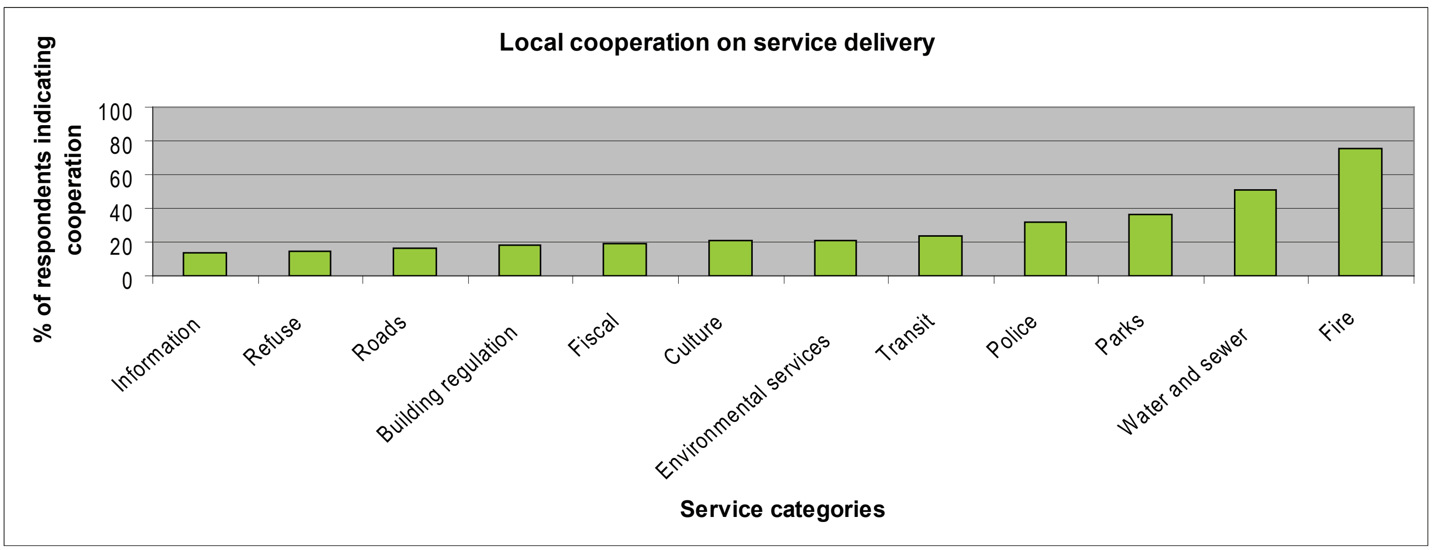
Based on the surveys and interviews, the following conclusions are drawn regarding the extent of planning and zoning cooperation in Michigan; the roles played by key actors such as counties, regional agencies, and planning consultants in fostering cooperation; and the other factors that promote or impede cooperation on land use planning and zoning issues.

Extent of cooperation on planning and zoning issues

The study's key purpose was to ascertain the extent of land use cooperation on the ground. Starting with cooperation around services (see Figure 1), as anticipated, a vast majority (94.5%) of respondents indicated that their jurisdiction cooperated with other municipalities on service delivery. Transit (23%), police (31%), parks (36%), water and sewers (51%), and fire (76%) are services that are most commonly addressed through cooperative arrangements.

Figure 1

Extent of cooperation on service delivery

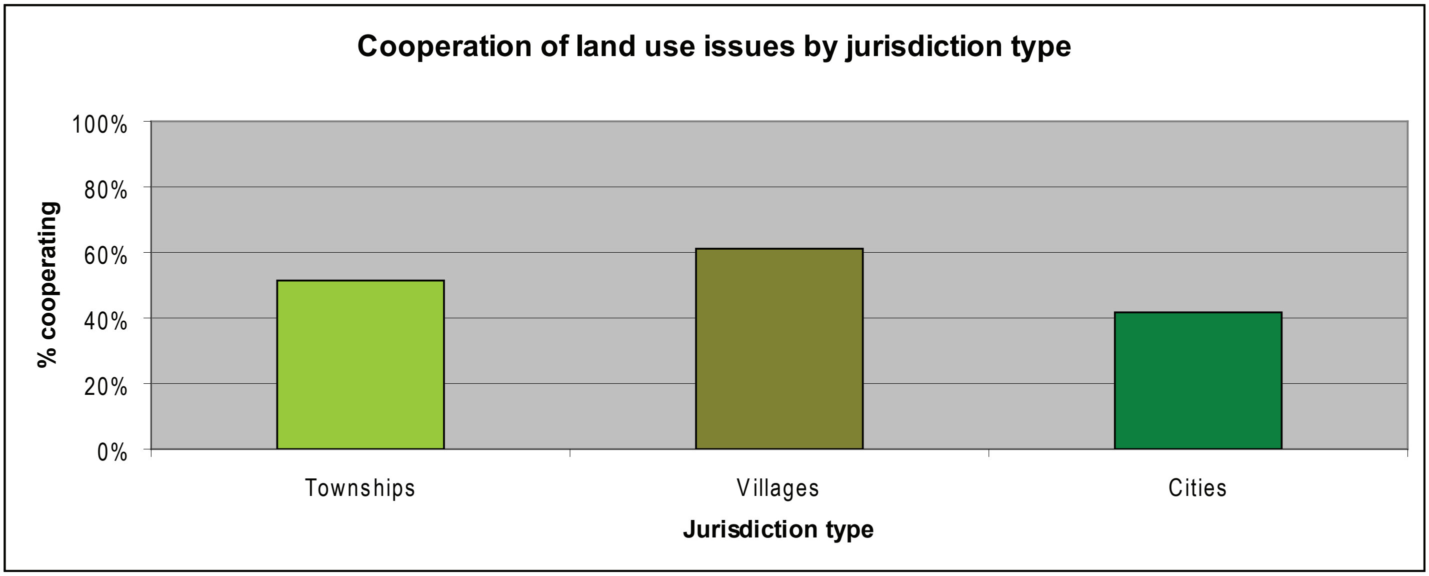


The cooperation mechanisms employed ranged from a continuum of informal talks and meetings among planning commission members to more formal means such as establishing joint plans and ordinances and forming Joint Planning Commissions. The percentage of respondents indicating the use of these mechanisms is depicted in Figure 3.

As the figure indicates, a Conditional Land Transfer Agreement, or PA 425 agreement (51%), is the most commonly used cooperative mechanism for land use planning purposes. This is followed by informal cooperation (45%) among local decision makers. Since conditional land transfer agreements are primarily used for economic development purposes (although they do have land use consequences), it is extremely important to look at those cooperation mechanisms that have a direct impact on development patterns in a region. Analysis suggests that about 21% of municipalities reported having joint master plans and 14% reported considering, discussing, or having established joint planning commissions. Further, about 11% of municipalities indicated using regional land use policies (e.g., urban growth boundaries) and developing joint regional design guidelines.

Figure 2

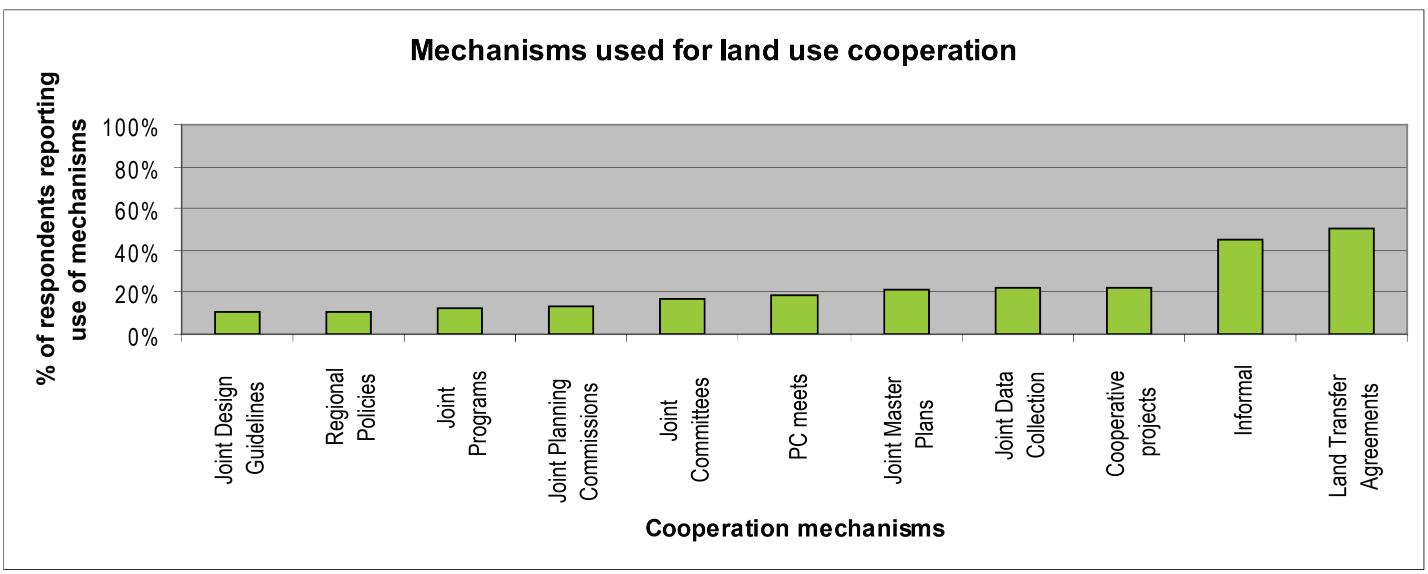
Extent of land use cooperation by jurisdiction type



We wanted to understand if cooperation around particular services served as a precursor to cooperation on planning and zoning issues. Of all the service categories examined, quantitative analysis revealed that cooperation around water/sewer and transit services were the only service types that were significantly correlated with cooperation on land-use issues. This is not surprising considering that water/sewer and transit decisions have more direct impacts on land use patterns. Further analysis showed that municipalities that cooperate on transit services cooperate significantly more on land use issues when compared to municipalities that do not cooperate on transit issues. Similarly, municipalities that cooperate on water and sewers cooperate significantly more on land use planning issues when compared to municipalities that do not cooperate on water and sewer issues.

Figure 3

Extent of land use cooperation



24% of respondents indicated that their jurisdiction was involved in an unsuccessful attempt to cooperate on planning and zoning issues. Frequently cited reasons for these unsuccessful attempts could be divided in two components: reasons that impede decision makers from getting to the table and reasons that make it difficult to sustain their participation at the table (see Table 1). The first set of reasons include turf problems, trust issues, issues not being ripe enough for action, prior annexation issues, and lack of real interest from communities. The second set of reasons include a lack of money to sustain effort, unwillingness to compromise at the table, inability to reach an agreement, and lack of communication among participants.

Table 1

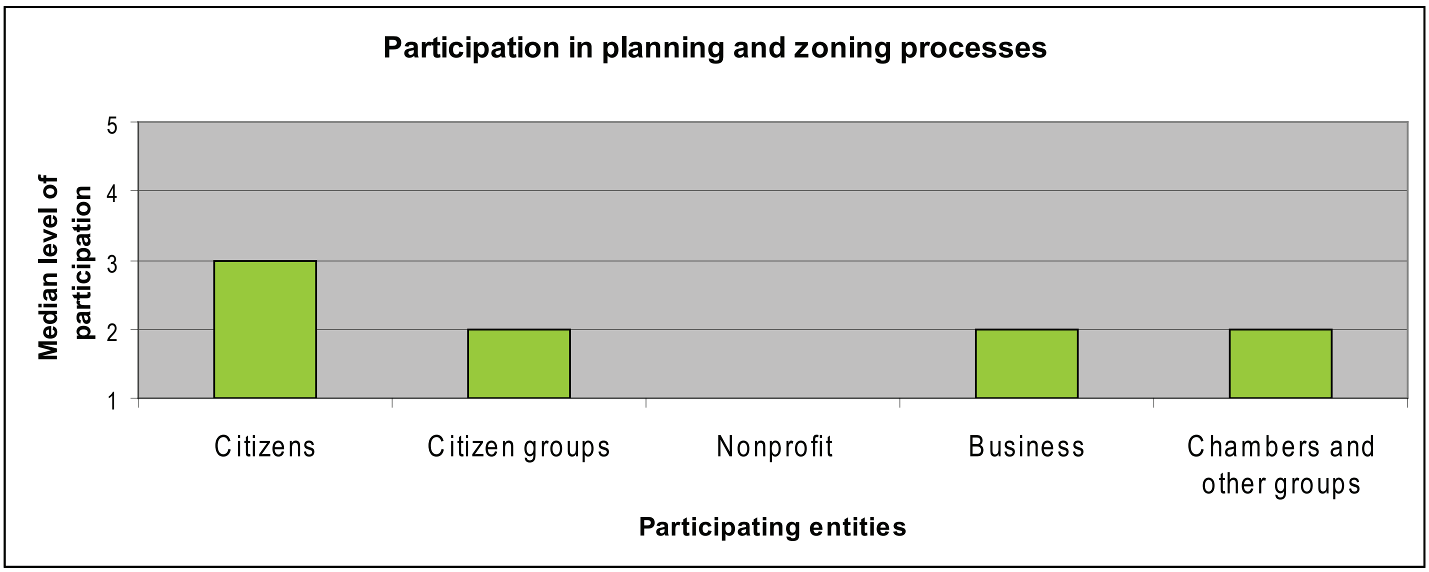
Factors affecting cooperation

Factors impeding the formation of cooperative efforts	Factors impeding sustained participation in cooperative efforts
Turf problems	Lack of money to sustain effort
Trust issues	Unwillingness to compromise at the table
Issues not being ripe enough for action	Inability to reach an agreement
Prior annexation issues	Lack of communication among participants.
Lack of real interest from communities	

Municipalities were asked to rate the extent of participation of certain individuals and groups in the local planning and zoning process on a scale of 1 (very low support) to 5 (very high support). The results are shown in Figure 4. Overall participation is very low to moderate in all the groups examined with citizens participating the most in the local planning process (median of 3, or "moderate participation"). Non-profits registered the lowest on the scale of participation (median of 1, or "very low participation"), while citizen groups, businesses, and chambers registered low participation scores (median of 2).

Figure 4

Extent of participation on local planning processes



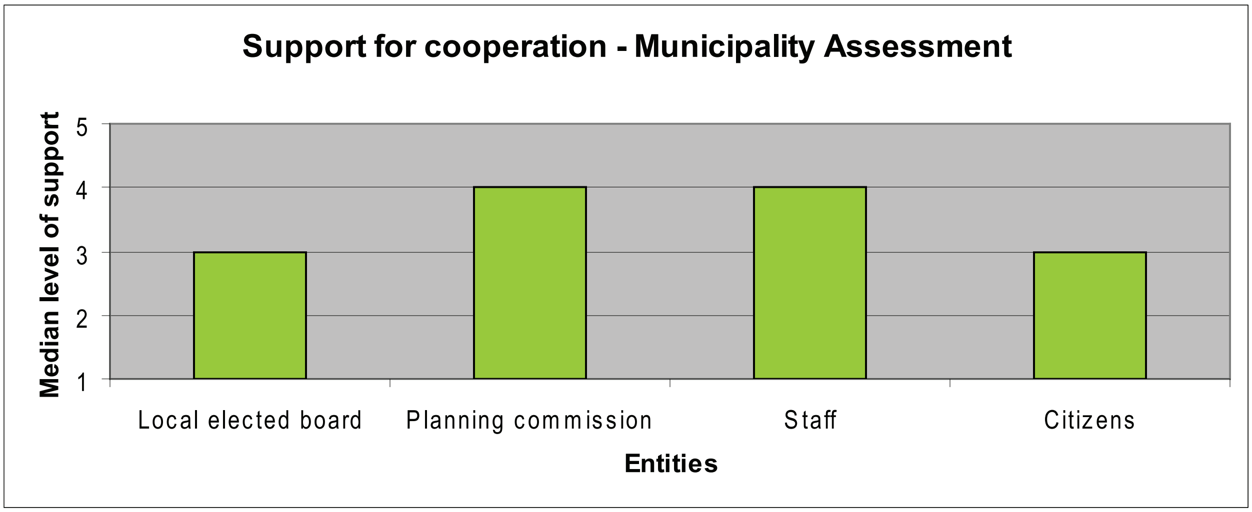
Of the five individuals and groups examined, the participation of citizens, citizens groups, and businesses were significantly positively related to whether local governments cooperate on planning and zoning issues; as participation of these three groups increased, cooperation increased significantly.

Municipalities were then asked to rate the extent to which certain individuals and groups supported the idea of cooperation on planning and zoning issues on a scale of 1 (very low support) to 5 (very high support). The results are shown in Figure 5. Support for cooperation ranged from moderate to high. Respondents indicated, on average, that planning commissions and staff showed high levels (median of 4) of support for cooperation. Analysis shows that the extent to which the local elected boards, staff, and citizens support cooperation are all significantly correlated with the extent of cooperation on land use planning and zoning issues.

Similarly, county planning officials were asked to rate the extent to which the County Board of Commissioners, county staff, and local elected officials within the county supported cooperation on a scale of 1 (very low support) to 5 (very high support). These results are shown in Figure 6. County respondents indicated, on average, that local elected officials in their counties showed moderate support for cooperation. The county board (median of 4) and county staff (median of 4.5) showed higher levels of support for cooperation.

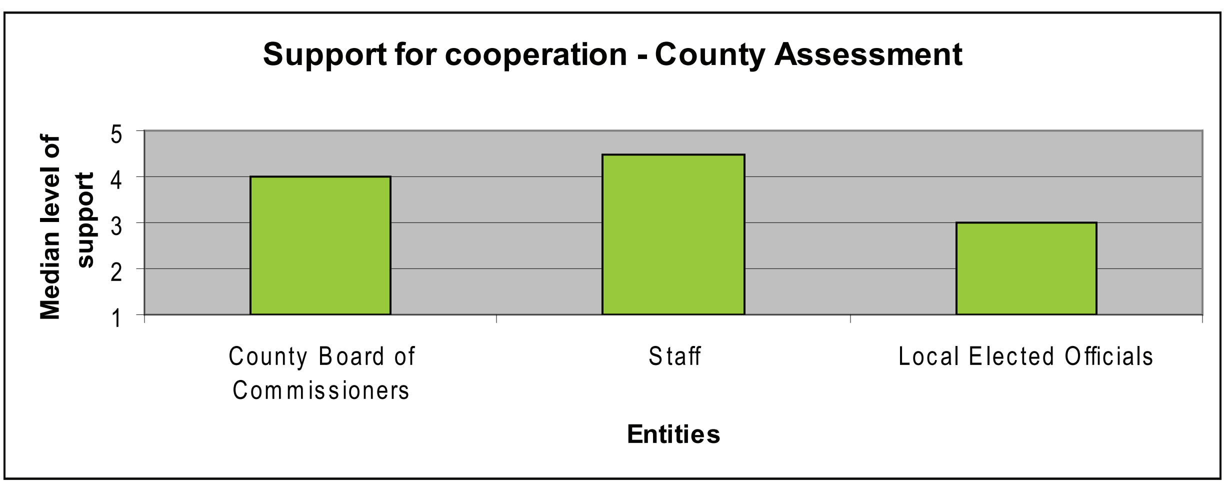
County role. Counties in Michigan do not have regulatory authority over local plans, ordinances, or local planning processes. Counties typically play an advisory role in the planning process, providing numerous forms of assistance to local governments. Analysis reveals that 90% of counties comment on local master plans. This, however, is the only consistent function that counties in Michigan perform. County role with regard to general planning and zoning seems to be widely dispersed: 20% of counties reported that they plan and zone for local governments, 30% of counties assist local governments with master plan preparation, 35% of counties indicated that they provide technical assistance to local governments, while 55% reported that they provide data for plan preparation.

Figure 5
Extent of support for cooperation on planning and zoning efforts – Municipalities' Assessment



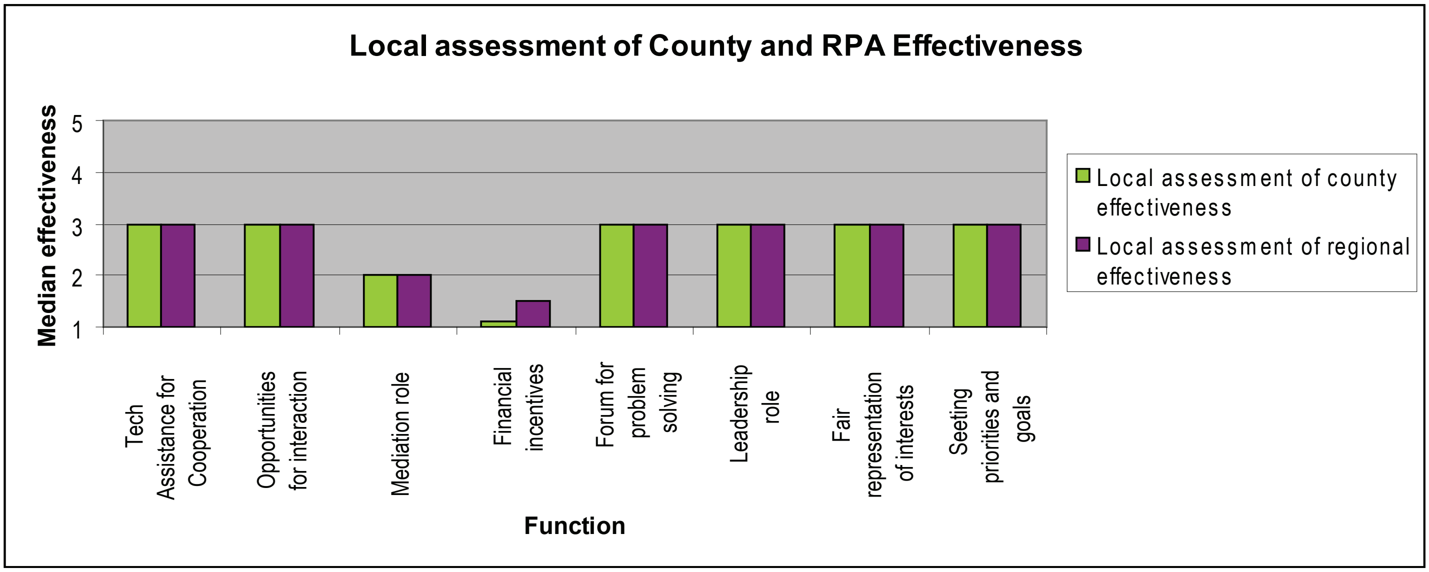
In addition to their role in the general planning process, counties perform several functions that are aimed at facilitating cooperation among municipalities in the county. These functions range from providing technical and financial assistance for local cooperative efforts to providing several opportunities for local elected officials and planning staff to interact. The county role in facilitating local cooperation was examined using both surveys of officials from municipalities and surveys of county officials.

Figure 6
Extent of support for cooperation – County Assessment



Respondents from municipalities were asked to rate the effectiveness of the county planning department at performing several functions that are important for facilitating cooperation (see Figure 7). On a scale of 1 (extremely ineffective) to 5 (extremely effective), municipalities indicated that county planning agencies were moderately effective (median of 3) at providing technical assistance for cooperation, providing a forum for problem solving, providing leadership, providing a fair representation of county-wide interests, and setting county-wide priorities and goals. Most importantly, county planning agencies were rated as ineffective in providing mediation support (median of 2) and extremely ineffective in providing financial incentives (median of 1) for local cooperation on planning and zoning issues.

Figure 7
Municipalities' assessment of County and RPA effectiveness



The effectiveness of the county planning agency at performing the following functions was significantly correlated with the extent of local cooperation:

1) The technical assistance provided by the county planning agency for local cooperative efforts
2) The extent to which the county planning agency serves as a forum for county wide problem solving
3) The extent to which the county planning agency provides a fair representation of county-wide interests
4) The extent to which the county planning agency sets county-wide land use goals and priorities

In a separate survey, county officials were asked to prioritize the same list of functions that are important for facilitating local cooperation. Results are shown in Figure 8. Two results are important: On average, county agencies consider providing financial incentives for local cooperation and mediation services for local governments as their lowest priorities. This assessment is consistent with how effective municipalities thought county planning departments were at providing mediation support and financial incentives.

The survey of county officials also revealed additional information on how county planning departments impact local cooperation. Some counties are more proactive than others at providing opportunities for local elected officials and planners to interact through workshops, conferences, committees, and working groups. This is important because the number of forums that counties provide for interaction among local decision makers was significantly correlated with the extent of local cooperation around planning and zoning issues within the county. The analysis also shows that the ability of counties to organize forums for municipalities is dependent on the resources available at the county level. In fact, the number of county-organized forums for local interaction was significantly correlated with the number of staff in the county planning department. This finding highlights the importance of strengthening the resources of county planning departments, as not all counties have the capacity to actively engage municipalities in cooperative planning processes.

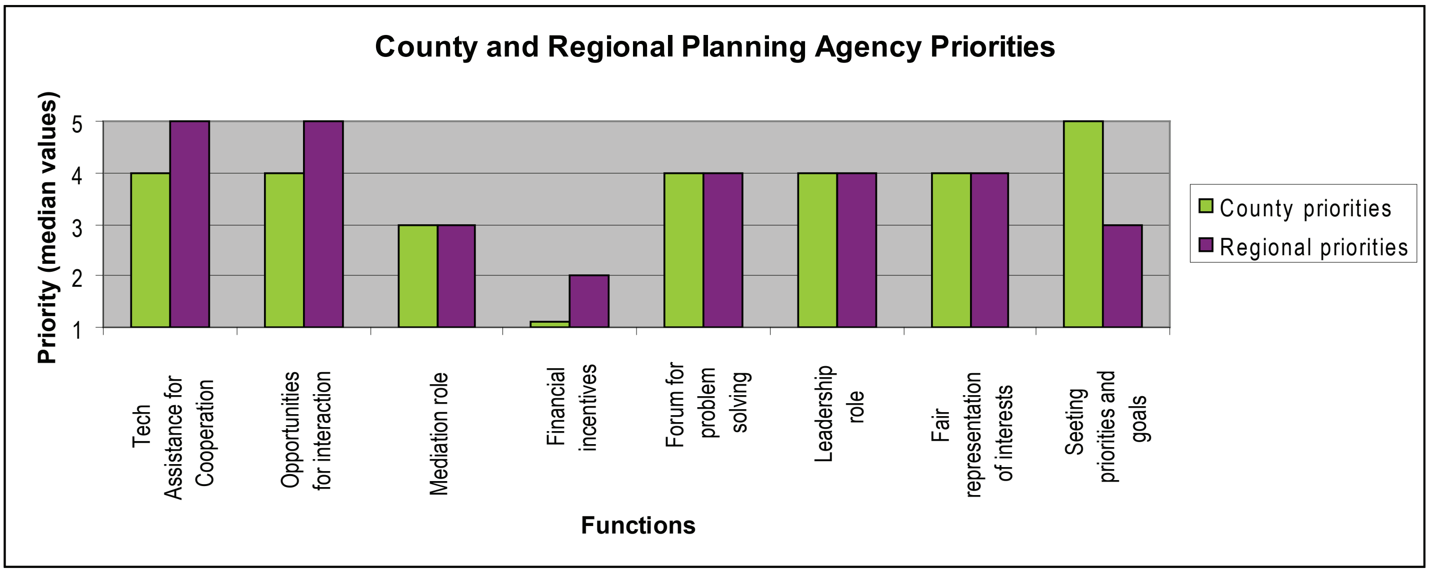
Regional role. RPAs (also referred to as State Planning and Development Districts) in Michigan, like the counties, do not have regulatory authority over local planning processes and plans. However, while 90% of counties report having a county-wide land use plan, only 40% of regional agencies have regional plans in place. The RPAs perform a range of functions, with about 70% reporting that they comment on master plans and assist with local plan preparation and 90% reporting that they provide technical assistance and data to municipalities. These statistics, when compared with county statistics, reveal that county planning departments and RPAs are performing many duplicative roles. Division of labor between these two agencies would help direct some valuable and much needed resources more efficiently.

In the survey sent to municipalities, respondents were asked to rate the effectiveness of the RPA at performing several functions that are important for facilitating cooperation (see Figure 7). On a scale of 1 (extremely ineffective) to 5 (extremely effective), municipalities indicated that RPAs were moderately effective (median of 3) at providing technical assistance for cooperation, providing a forum for problem solving, providing leadership, providing a fair representation of county-wide interests, and setting county-wide priorities and goals. Most importantly, RPAs were rated as ineffective in providing mediation support (median of 2) and extremely ineffective in providing financial incentives (median of 1.5) for local cooperation on planning and zoning issues.

The following functions performed by the RPA were significantly correlated with the extent of local cooperation on planning and zoning issues:

1) The extent to which the RPA provides financial incentives for cooperation
2) The extent to which the RPA serves as a forum for problem solving
3) The extent to which the RPA provides a fair representation of county-wide interests
4) The extent to which the RPA sets regional land use goals and priorities

Figure 8
County and RPA priorities



In a separate survey, RPA officials were asked to prioritize the same list of functions that are important for facilitating local cooperation. Results are shown in Figure 8. Two results are important: Like the county planning agencies, on average, RPAs consider providing financial incentives for local cooperation and mediation services for local governments as their lowest priorities. This assessment is consistent with how effective municipalities thought RPAs were at providing mediation support and financial incentives.

These data provide valuable information on those county and regional roles that need to be emphasized to increase cooperation among municipalities.

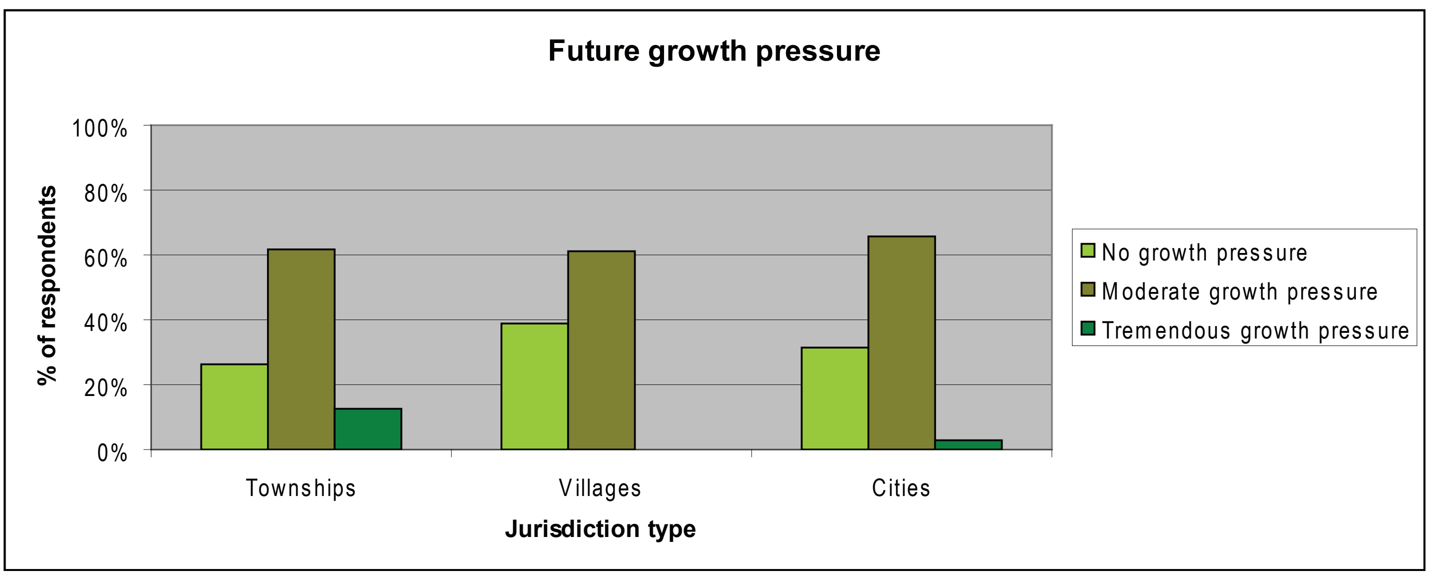
First, when municipalities were asked to offer suggestions on incentives that could be provided to better facilitate cooperation, most respondents indicated the need for “carrots” such as financial incentives, awards, and recognition for cooperating municipalities. Yet, counties and RPAs list providing financial incentives for cooperation as one of their lowest priorities. Second, several municipalities indicated the lack of agreement on core regional issues and problems, inability to reach agreements at the table, the lack of communication among participants, and unwillingness of participants to compromise as key impediments to cooperation. Prior academic research suggests that these issues can be resolved if professional mediation, conflict management, and negotiation opportunities are available to local decision makers. Yet, both counties and regional agencies list providing mediation services for cooperative efforts as one of their lowest priorities. State assistance in these areas has the potential to greatly increase local cooperation on regional issues.

State role. State level activity on regional land use planning shows two key recent developments facilitating cooperation in Michigan:

1) The Coordinated Planning Act 2001 requires all municipalities to send drafts and completed master plans to neighboring municipalities, the county, or RPA (among other entities) during plan preparation and updates. Research reveals that while county and regional agencies comment on the master plans and plan updates they receive, most neighboring municipalities do not. Local governments, for their part, incorporate most of the county and RPA comments in their plans but typically receive limited feedback from neighboring municipalities. Policy makers might consider strengthening requirements for feedback on master plans from neighboring municipalities to ensure systematic rather than sporadic interactions among municipalities.
2) The Joint Municipal Planning Act 2003 enables local governments to form Joint Planning Commissions. Research reveals that at least seven Joint Planning Commissions (JPC) have been formed under this legislation. A number of municipalities indicated that they were considering PA 425 or the conditional land transfer agreements as part of the JPC agreements to resolve concerns surrounding annexation. To supplement this legislation, policy makers might consider establishing incentive packages that make it easier for municipalities to plan jointly. An example of an incentive package might be regional Transfer of Development Rights (TDR) programs for cooperating municipalities.

Several respondents indicated that policy makers should consider developing a set of state-level goals and priorities (perhaps from the Leadership Council report) for land use planning in Michigan and identify areas in the state to be protected from development and areas to be prioritized for development. Policy makers might also consider establishing minimum master plan contents including a master plan section on regional cooperation and minimum consistency requirements for boundary uses and planning and zoning categories (e.g., R1, R2). Several respondents also suggested that the state should provide incentives through revenue sharing by prioritizing those communities that have regional cooperative efforts and plans in place.

Figure 9
Growth trends by jurisdiction type



Factors Affecting Cooperation - Environmental Factors

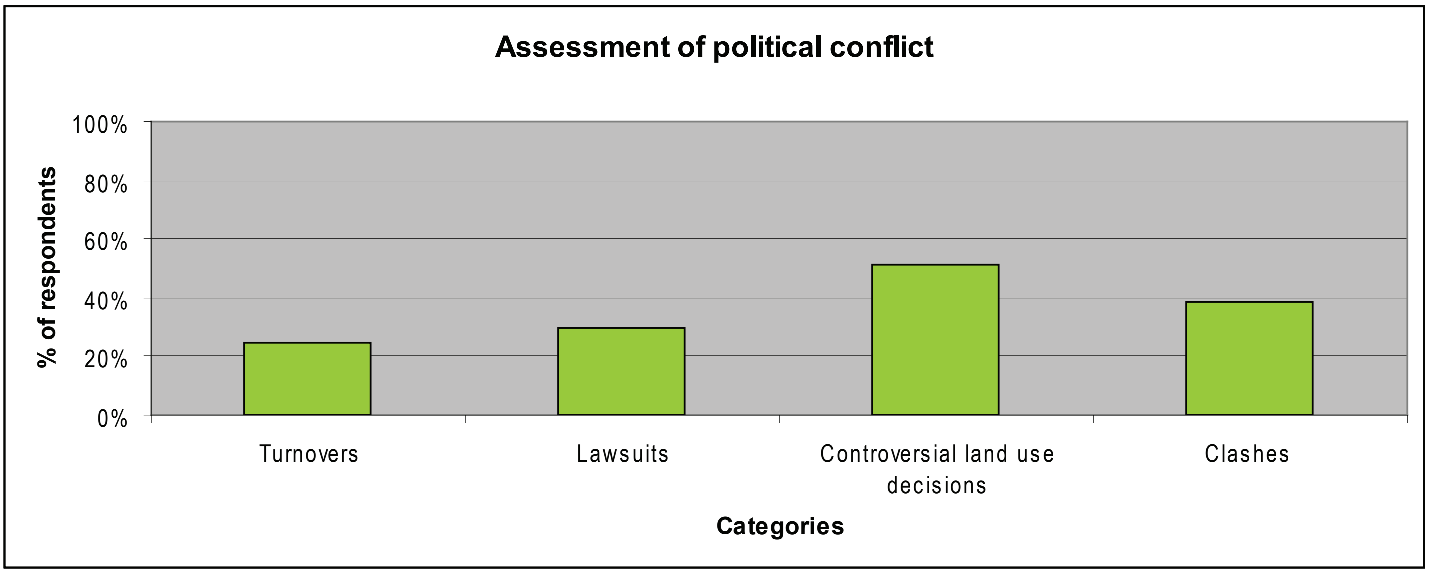
Growth trends. Municipalities were asked to provide an assessment of the extent of past and future anticipated growth pressure (see Figure 9). More than 62% of municipalities indicated that they anticipated facing moderate growth pressure in their jurisdictions. When analyzed by jurisdiction type, townships seem to be anticipating the most growth over the next 5 years, with about 12% of townships indicating tremendous anticipated future growth pressure compared to no villages and 3% of cities indicating the same amount of growth over the next 5 years.

Both past and future growth pressure were significantly positively correlated with the extent of cooperation among municipalities on planning and zoning issues. Growth pressure seems to be one of the motivators of cooperation.

Political conflicts. Municipalities were also asked about the extent of turnover they faced in the makeup of their elected boards, whether these turnovers were due to land use issues, if there were clashes between pro-growth and no-growth interests in their jurisdictions, if the municipalities had faced land-use-related lawsuits, and if the municipalities had faced controversial land use decisions (see Figure 10).

25% of municipalities indicated substantial turnover in the makeup of their elected boards in the past 5 years. All turnovers were through general elections and about 2% of the turnovers were due to land-use issues. 30% of responding municipalities indicated that they had experienced land-use-related lawsuits over the past 5 years. 51% of responding municipalities indicated controversial land-use decisions, and about 38% indicated clashes among pro- and no-growth interests in their jurisdiction. Most importantly, the study finds that controversial land-use decisions are significantly positively related to cooperation. Further, municipalities that have experienced controversial land-use decisions cooperate significantly more on land-use issues than municipalities that have not experienced controversial land-use decisions.

Figure 10
Assessment of political conflict



Factors Affecting Cooperation - Informal Institutions

Municipalities, counties, and regional agencies were also asked for their assessment of several informal institutional factors thought to affect cooperation. These factors ranged from respondents' assessment of the political climate in their region to an assessment of their relationships with other local decision makers. Several results are worth noting. First, municipal, county, and regional decision makers, on average, agreed that they shared good relationships with decision makers from surrounding municipalities. Second, municipal, county, and regional decision makers agreed that they could not identify strong leadership for land use cooperation in their region. However, those municipalities that could identify strong leadership at the regional level cooperated significantly more than municipalities that could not identify strong leaders to guide cooperative efforts at the regional level. Third, all three types of decision makers, on average, agreed that there was an absence of strong regional institutions that fostered cooperation in their respective regions. Fourth, with the exception of regional decision makers, both county and municipal decision makers, on average, indicated that they had limited access to the financial, technical, institutional, and other resources needed to forge cooperative alliances among elected officials on land-use issues. Finally, while all three types of decision makers indicated that most municipalities in their region faced similar problems, they all also indicated that municipalities in their regions did not agree on what the problems were and how to solve them. This last finding relates back to the importance of providing mediation and consensus building services for municipalities through county planning or RPAs.

Other Findings

Role of planning consultants. Interviews revealed that most municipalities and counties in Michigan lack adequate resources to plan, zone, and enforce land use policies effectively. Only 34% of Michigan municipalities indicated that they employed full-time staff for planning and zoning purposes. About 54% of municipalities indicated that they employed part-time staff. Of the responding counties, 50% indicated that they employed full-time staff and 50% indicated that they employed part-time staff. Although regional agencies seem to be doing better in terms of capacity than counties and municipalities, the distribution of staff across regional agencies is highly varied with a range of 3-80 staff members per agency.

Given this assessment, it is not surprising to note that over 73% of local master plans are prepared by planning consultants. Several municipalities indicated that planning consultants are more likely to provide unbiased advice on what municipalities “ought” to do in terms of planning and zoning. This places planning consultants in the unique position of having the opportunity to provide both assistance and information on cooperation to decision makers at the local level, especially when adjacent local governments hire the same consultant independently. In Michigan, several municipalities rely either completely or to a large extent on planning consultants to serve as planning staff. In these situations, the relationship between the county planning department and the planning consultant plays an important role in facilitating cooperation. County planning departments indicate that their expertise is more likely to be accepted and incorporated in cooperative efforts if such efforts are led by consultants with whom they share a good relationship.

Training. 64% of municipalities responded that they had received training on the benefits of cooperation on planning and zoning issues. However, analysis shows that such training does not have a significant direct impact on local cooperation. Case studies indicate that training works indirectly through the process of “learning” that local and regional networks facilitate. Municipalities also reported that training is effective if it includes conversations with elected officials from municipalities that have established successful cooperative efforts. Training also seems to be effective in terms of providing decision makers with access to the information and expertise available for the topic at hand, should the municipality see the need to take the first step towards cooperative action.

Motivations for cooperation. When asked about the reasons why municipalities should cooperate with each other on land use issues, most decision makers indicated that cooperation was important to ensure the compatibility of land uses and development patterns and the consistency of land use policies and decisions across jurisdictional lines. Decision makers were not convinced that a number of the land-use challenges faced by municipalities could not be solved exclusively at the local level or that some problems relating to land-use planning, social equity, and environmental protection might be better solved at a metropolitan or regional level. Similarly, decision makers, on average, were tentative about justifying cooperation on land-use issues using arguments of sustainable land-use patterns.

Case studies of communities currently involved in cooperative efforts reveal other motivations (see Table 2). Local decision makers who were part of cooperative efforts involving urban cities or villages, and rural townships indicated the presence of compatible goals as a key motivator of cooperation. Here townships that wanted to stay rural cooperated with cities or villages that wanted to stay urban. This allowed townships to consider directing development towards the city or village where infrastructure was already in place using policies such as urban growth and service boundaries. Local cooperative efforts have also capitalized on commonalities such as school district and watershed boundaries to define common issues of concern. Several jurisdictions started their interactions by identifying small common problems and achieving small cooperative successes in solving these problems together. Several others started planning cooperatively by reinterpreting their jurisdictional lines as common areas rather than boundaries and focusing on boundary uses as the starting of point for joint planning. Finally, many local governments are seeking protection against claims of exclusionary zoning and needed development by engaging in cooperative planning. Although not tested in the courts (yet), the Joint Municipal Planning legislation provides this protection.

Factors That Were Reported as Indispensable for Cooperation

Incentives for cooperation. Although 9% of the respondents from municipalities indicated that the state should not intervene in local planning processes even if the intervention is through the provision of incentives, there seems to be considerable interest in state-sponsored incentives for cooperation from the other respondents. About 30% of respondents indicated the need for financial incentives for cooperation. This is not surprising considering that only 20% of municipalities that are currently cooperating have received grants to further their cooperative efforts. Other suggestions included more education and training for cooperation, making cooperation mandatory, establishing state-level guidelines for cooperation, streamlining of administrative requirements for land use planning, policy-based incentives (e.g., tax-base sharing, revenue sharing, and priority funding), and more recognition and awards for cooperating communities. These suggestions are not surprising, either. At least 32% of municipalities indicated that neither the members of the planning commission nor the members of their local elected boards had undergone land-use planning related training. Further, about 56% of municipalities indicated that neither their elected board members nor their planning commission members had received training on growth-management techniques. This study also finds that only 16% of municipalities that are currently cooperating have received recognition for their cooperative efforts.

Table 2

Factors that are indispensable for cooperation - Case study results

Factors that were reported as indispensable for cooperation
Leadership
Building of trust over time through smaller collaborative projects
Having a formally organized cooperative effort for institutional memory
Working through a regional plan
The role of the county as a neutral facilitator and for technical assistance
Good communication back and forth between respective boards and chief elected officials
A commitment to NOT leave the table irrespective of progress or lack thereof
Information through external seminars, workshops and gathered through networks
Good relationship between planning consultants and the county planning department

Discussion

Several interesting conclusions can be drawn from this study. First, despite obstacles, constraints and the lack of many incentives to cooperate, municipalities in Michigan are cooperating to some extent on planning and zoning issues. These cooperative efforts range from informal conversations among municipalities to more formal joint plans and joint planning commissions being established among multiple local government units. Apart from conditional land transfer agreements, most of the ensuing land-use cooperation is through informal mechanisms such as collaborative projects, meetings, and handshakes among local staff and elected officials. The formation of joint planning commissions, regional policies, joint plans, and ordinances are still at their infancy in Michigan.

Second, this study indicates that county and RPAs have the basic infrastructure in place to play a larger and clearer role in facilitating local cooperation. Several roles played by county planning departments and RPAs significantly impact the extent of local cooperation on planning and zoning issues in Michigan. Most notably, the financial incentives provided by both agencies, the extent to which both agencies are effective at providing forums for problem solving, whether these agencies provide a fair representation of county-wide and regional interests, and their effectiveness at setting county-wide and regional land use goals were all significantly related to cooperation on planning and zoning issues.

Third, respondents indicated several factors that explain the lack of cooperation and unsuccessful cooperation attempts in Michigan. These factors could be aligned along two dimensions: factors that hinder the formation of cooperative efforts and factors that hinder the long-term success of a cooperative effort. Financial incentives and mediation services will go a long way in terms of alleviating these impediments and getting decision makers to both come to the table and stay there. Yet, both county planning agencies and RPAs indicate that providing financial incentives and mediation services are their lowest priorities. Municipalities agree, indicating that counties and RPAs are extremely ineffective at performing these two services.

Fourth, municipalities are facing severe financial constraints and these constraints are reflected in the resources they have available for planning and zoning purposes. This implies that planning consultants have more of a niche in developing local master plans and advising joint planning efforts. Little is known academically about the role planning consultants play in shaping land use and regional outcomes. More investigation is needed in this area.

Finally, in considering whether the environment in Michigan is ripe enough to allow sweeping changes to the current land use system and regional planning requirements, policy makers might weigh a few alternative scenarios. On one hand, voluntary cooperation takes a long time to materialize – most of the cooperative efforts that have been formalized to joint planning commissions today in Michigan have been in place for more than ten years. It is only reasonable, therefore, to assume that those efforts that are at a more informal stage today will also take time to develop into more formal partnerships. Further, only a few communities cooperate on planning and zoning issues in a manner that will influence land-use patterns. On the other hand, mandated cooperation will require tremendous oversight and enforcement and is subject to the criticism that meaningful cooperation will be replaced by pro-forma compliance. Incentive-based approaches to cooperation offer a middle ground and an incremental approach to achieving cooperation. However, incentive packages have to be well-crafted so that they not only promote more cooperation than a voluntary approach would allow, but also incrementally add up to a comprehensive package of land use and growth management reform as seen in the mandated states.

Suggestions

In considering comprehensive reform with regard to cooperation on planning and zoning issues, policy makers might consider focusing on the following:

Several municipal, county, and regional decision makers indicated the need for guidance from the state on planning and zoning issues. These guidelines might be produced in the form of a state land-use plan, concise state goals for planning derived from the Land Use Leadership Council Report, establishing the minimum content of local master plans, and minimum cooperation requirements. Reforms aimed at achieving greater cooperation should distinguish between cooperation with regard to plans and policies (e.g., ensuring consistency) and cooperation among decision makers (e.g., ensuring joint decision-making).

The different types of plan-related cooperation are:

- Horizontal consistency – Consistency between the plans of adjoining municipalities
- Vertical consistency – Consistency between municipal, county, regional and state plans
- Internal consistency – Consistency within the policies promoted in plans; consistency between the master plan, zoning ordinance, capital improvements programming, and school district plans
- Reverse consistency – State, regional and county agencies ensuring that their plans are consistent with local plans
- Boundary consistency – Ensuring consistency of at least boundary uses
- Terminology consistency – Ensuring uniform zoning and land use classification terminology in the state
- Programmatic consistency – Consistency in the requirements and operation of various programs at the state, regional and county levels

The different types of actor and decision-maker-related cooperation are:

- Horizontal cooperation – Cooperation among municipalities and agencies
- Vertical cooperation – Cooperation among municipal, county, regional and state governments and agencies (e.g., municipalities cooperate with county road commissions and county planning commissions)
- Intra-governmental cooperation – Cooperation within different governmental levels (e.g., between county road commissions, drain commissions and the county planning commission or planning department)

Setting minimum standards for cooperation is important for several reasons. Chief among them is that a false ceiling is created in the absence of minimum standards or when the minimum standards are too low. For example, several municipalities in Michigan were content to report that they cooperated only by commenting on the master plans of neighboring jurisdictions – an activity that is required by the Coordinated Planning Act of 2001. When asked as to why they did not cooperate on land use issues, several municipalities indicated that did not see the need to – that there were no pressing problems to cooperate on. Policy makers in Michigan can either wait for a time when pressing problems will create a ripe environment for reform, or act proactively like those seven communities that have Joint Planning Commissions in place today. These communities know change will occur some day in the future and want to be ready for it. Because those who cooperate in Michigan experience tremendous benefits from their joint efforts, cooperation reform will move Michigan municipalities in the direction of more sustainable and equitable land use patterns.

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Section 4

Global Positioning: Strategic Planning for Urban Competitiveness

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Introduction

Michigan's economic future must incorporate three major elements: the knowledge economy, globalization, and network society. The knowledge economy captures the significance of science and technology as a driver of the economy, and the need for an educated workforce to facilitate economic growth. As structural change progresses in terms of what is made and how products and services are delivered, there is also a geographical restructuring with production systems fragmented to locate in the lowest cost and most advantageous areas. This globalization of production affects people and places as they now compete across the world rather than locally. The third phenomenon, network society, reflects the impact of information and communication technologies (ICT) on how people live, work, and interact. To be successful, cities must reach out internationally to attract the business enterprises of the 21st Century.

The aim of this section is to empower stakeholders in Michigan's cities to formulate strategic planning approaches to enhance the economic development competitiveness of their cities in the global economy and network society. The focus of this concern is to encourage the formulation of locally specific effective policies to attract business and investment from outside the United States. Each city must invent its own unique strategy for attracting business and investment from abroad. To be successful, such strategies must build on the particular advantages of the place, which means going beyond the defined city to include the surrounding region. In today's global economy, the city-region is the proven principal functional unit that must be the primary focus of policy and strategic attention (Scott, 2001).

Analysis of the global competitiveness focused on thirteen core cities in Michigan, which for the purposes of this paper, we are branding the thirteen-city region "metroMichigan." The positioning of these cities starts with a framework for action called the ALERT model, followed by exploration of three important dimensions of global positioning: investment, branding and competitiveness. Strategies Michigan cities can consider are detailed in our discussion of global positioning and policy direction. Finally, an Appendix is included to cover, in more detail, some of the major concepts discussed in this paper.

The ALERT Model

The policies and strategic processes outlined here are based on the ALERT model, which frames complex policy formulation activities in the context of the global economy and network society (Corey & Wilson, 2006). The principal elements of the model consist of five activities or components that need to be led and executed by representative stakeholders of the city-region and its partner city-regions of Michigan's core mayors. The ALERT model asks planners and communities to raise their **A**wareness of changing geographic (**L**ayers) and technological (**E**-Business) forces and to positively and creatively react (**R**esponsiveness) through information, collaboration and relational planning (**T**alk). What is required from would-be users of the process introduced here is sustained and creative engagement supported by the will and on-going commitment to have their city and its region prosper in the new realities of the global economy. The ALERT model is employed in detail for the first portion of analysis on foreign investment in Michigan cities, to provide an example of how it can be used to prompt planning and action.

The ALERT activities to promote foreign business and investment attraction should be actualized not only by actors from government. In order to build a base of sustained support for the foreign investment attraction effort and related strategic initiatives, there needs to be widespread, diverse, and representative stakeholders from metroMichigan involved and influencing the development and evolution of policies to attract business from outside of the United States. Stakeholders, in general, should include professional urban, regional, and corporate planners; citizen and volunteer planners; and other representatives from the for-profit sector; the trade unions and organized labor sector; the institutional and nonprofit sector; individuals; and, of course, various actors from government sectors at all levels of relevant governments.

Invest

The conventional terminology for investing in another country is foreign direct investment (FDI). A conventional definition is investment in a country by foreign citizens or foreign corporate enterprises that often involves majority stock ownership of the recipient domestic enterprise (Lagace, 2002). The Organization for Economic Co-operation and Development sees FDI as a long-term relationship with a significant degree of influence on management (OECD, 1996).

Michigan's cities wish to attract foreign direct investment for local benefit, such as the creation of jobs, new technologies, more efficient and effective business process approaches, and improved management as a result of fresh perspectives and innovative mindsets. Investors in Michigan seek new and expanded markets, a good relationship between labor cost and productivity, cost reductions by means of economies of scale, access to needed skill sets, talent, technology, and natural resources. In sum, most companies that engage in international business and investment do so to take advantage of comparative and competitive advantages.

There are 3,760 business operations in Michigan from outside the United States. The largest numbers of international operations are from Germany, Japan, the United Kingdom, Canada, and the Netherlands. In all, forty countries have invested in Michigan's diverse industrial and service sectors. The state's major export markets are Canada, Mexico, Germany, Japan, and China.

To compare some of the more effective and long-standing inward business and investment practices across the global economy, analysts must examine promotion approaches that are likely to be most appropriate to, in this case, the metroMichigan city-region. To illustrate, one might begin by exploring such promotion cases as Singapore and the Netherlands. For their respective market regions (i.e., Asia and Europe), they are recognized widely as best practice examples in promoting and being successful in attracting investment from overseas (Singapore Economic Development Board, 2007; Netherlands Foreign Investment Agency, 2007). In the highly competitive environment of today's global economy, it is essential that places seeking foreign investment have such agencies that facilitate inward business. The range and the working details of such promotion services may be discerned from close study of these exemplary agencies. One might subscribe to their newsletters, electronic mailing lists, and compile additional specialized promotional materials and ideas to be considered for tailored emulation in Michigan to stimulate local innovations in foreign business attraction. It should be noted further that such agencies, especially some of those whose missions are to attract foreign investment into selected Asian countries, have also evolved effective intelligence gathering functions that can inform strategic planning for inward business attraction and other economic knowledge exploration.

Another best-practice source of learning is Sweden. In several ways, Sweden is comparable with Michigan. In addition to both places having four distinct seasons, which means that there are some similarities and analogies in tourism and forestry, both areas have total populations at the nine-to-ten-million-person level. Sweden is a bit less than twice as large as Michigan, in terms of area. Similar to the other countries and economies in the Nordic and Baltic regions, Sweden has fully embraced information and communications technologies, in terms of business application, use and manufacturing. Sweden and the Nordic-region economies also have engaged the opportunities and challenges of globalization, including the pursuit of foreign business and investment. At the end of August 2007, Michigan Governor Jennifer Granholm visited Sweden seeking for Michigan the creation of new jobs and learning how Michigan might provide new sources of alternative energy (Weekly Newsletter, 2007). Sweden's Invest in Sweden Agency has published a useful report, *Business and Investment Opportunities*. It is a must-read for metroMichigan foreign investment stakeholders and policies planners (Invest in Sweden Agency, 2007).

Other exemplars should be explored (OCO Global, 2007). Internationally, the Industrial Development Agency (IDA) Ireland organization is recognized as an effective global best-practice agency for attracting inward foreign investment (IDA Ireland, n.d.). Domestically, Enterprise Florida and Pennsylvania's newPA.com should be examined for the range of inward foreign investment and business services that, in practice, have proven to be effective. The city-regions and metroMichigan as a system can benefit from drawing on these models in designing their own operational programs and activities for attracting investment from outside the United States.

Given that this initiative for attracting business from abroad is being formulated in the context of the forces of economic globalization that are facilitated by the networked technologies of information and communications technologies, these important drivers and facilitators of change must be included explicitly in the foreign investment-attraction assessments and resulting strategies and tactics. Planners and stakeholders need to identify the relations of the various levels, dimensions, and different geographies of each individual metroMichigan city-region relative to the sub-regions of Michigan, the state, the nation, the North American economic region, the European Union, the Asia-Pacific region, and the global economy.

The Michigan Economic Development Corporation (MEDC) has specialists in the Canadian, German, and Japanese markets who are experienced in promoting investment from these markets. MEDC also offers extensive support services in facilitating the exportation of Michigan goods and services to global markets. The principal export industries of

Michigan are listed in Table 1. The state's major export markets are to Canada, Mexico, Germany, Japan, and China.

Table 1
Michigan's Top Exports by Industry, 2006

Vehicles, Parts	$17,900,000,000
Industrial Machinery, Computers	$6,300,000,000
Coal, Petroleum, Natural Gas	$1,800,000,000
Electronics	$1,800,000,000
Plastics, Plastic Products	$1,700,000,000
Instruments, Optics	$1,100,000,000
Furniture	$900,000,000
Iron, Steel	$900,000,000
Iron, Steel Products	$700,000,000
Organic Chemicals	$600,000,000

Source: Michigan Economic Development Corporation (2007)

Ideally, the state of the art of regional competitiveness should be such that clearly and simply it would inform public policy formulation and action. It is the E-Business and Network Linkages Spectrum that may be used by urban core area leaders, policy makers and metroMichigan stakeholders to assist in ensuring that the principal economic functions are used to attract foreign business and investment and enable these Michigan city-regions to be competitive.

The outcomes of this ALERT model component are the identification and then the strategic planning of the content (i.e., the substantive business activities of the particular city-region that may be marketed to attract foreign investment). To help organize analysis and planning, these activities may be framed across a spectrum of largely economic functions that range from production business functions, to consumption-business functions and to amenity and quality-of-life factors that are instrumental in attracting and retaining business in today's and tomorrow's global economy (see Table 2). The economic and business functions in each of the nine cells of Table 2 are suggestive of the major and generalized sectors that need to be considered in policies analysis and planning, and priorities for attracting foreign investment and business in the context of the global knowledge economy and network society.

Table 2
The "Business" of Electronic-Driven Economic Development and Network Linkages

Production Functions	Consumption (E-Commerce) Functions	Amenity and Quality of Life Factors
Science & Technology-driven Research & Development (C)	Online Procurement: B2B & B2G (D)	Social, Cultural and Institutional Activities (C & D)
Commercialization of Products & Services (C)	Online Retailing: B2C & G2C (D)	Natural Environmental Attributes (C)
Business & Producer Services (C) & Manufactured Products (D) Gov't Producer Services (C&D), e.g., regs, taxes, info, etc.	Value-Added Complementarities between Electronic (clicks) & Physical (bricks) Channels (C & D)	Quality Education, Human Capital Capacity Building and Talent Development (C & D)

The E-Business Spectrum component of the ALERT model makes two essential contributions: (1) it provides a conceptual framework for organizing this broad swath of urban and regional economic functions (i.e., production, consumption, and amenities and quality of life factors); and (2) it includes generalizations about the locational patterns, or the different geographies for each of the generic economic functions among the nine E-Business Spectrum cells. The E-Business Spectrum was constructed, therefore, to capture the current state in the evolution of electronically facilitated and traditional transactions of economic functions for particular city-regions. Further, the organization of a city-region's unique principal assets and resources of the contemporary knowledge economy can serve as the baseline for informing strategic planning for future states of intelligent development. The Spectrum further can be used as a checklist to ensure that the major economic functions, sectors, and/or activities are considered when strategizing the matching process between the demands of would-be foreign investors and the requirements of the recipient city of the metroMichigan region.

In addition to these content and economic-sectoral themes and industrial clusters noted above in the discussion of the Awareness element of the ALERT model, another useful substantive source for catalyzing strategic thinking is the Foreign Direct Investment service of *The Financial Times*. This global business newspaper conducts FDI competitive rankings of cities in major regions from around the world. These rankings and competitions are organized by means of the following categories and criteria:

Economic potential

- Economic potential (judged)
- GDP
- GDP growth
- Level of inward investment
- FDI deals (judged)

Cost effectiveness

- Out-of-town office rent
- Centrally located office rent
- Industrial rent
- Secretarial salaries
- Middle management salaries
- Manual labor rates

Human resources

- Universities (judged)
- Number of 2006 graduates
- Percentage of population with a degree

Transport

- Transport (judged)

IT and telecommunications

- Phone lines per 1000 people
- Mobile phone ownership (% of population)
- Broadband connectivity (% of population)
- Maximum broadband speed available
- Telecommunication charges

Quality of life for expatriates

- Housing (judged)
- Hospitals (judged)
- International schools (judged)
- Natural and cultural heritage (judged)

Best FDI promotion strategy

- Promotion strategy (judged)
- Three biggest attractions for FDI (judged)

- Incentives (judged)
- Infrastructure and urban planning projects (judged)

The Financial Times notes that this information comes from government sources, and that it is not possible to verify all of the information provided by government agencies. These kinds of criteria are important to know about and to take into account as city-regions in Michigan strategize and plan to attract 21st century business enterprises from outside the United States. Indeed, *The Financial Times' Foreign Direct Investment* Magazine uses these categories and criteria to do precisely this, that is, use these factors to identify "Asian Cities and Regions of the Future 2005/06" and "European Cities of the Future 2006/07". Such findings can be useful in implementing the Talk stage and element of the ALERT model that is discussed below.

Responsiveness, the fourth element of the ALERT model, should result in investment by means of the systematic identification of the economic demands of the market and the societal needs of government and the nonprofit institutional sectors in relation to the target city-region and its capacity to respond from its unique set of development assets and resources. At the heart of this component is the requirement to understand the disparities, gaps, and patterns of non-responsiveness between the demands of business from beyond the U.S. and the supply of assets of attractiveness of the locality to respond to those demands for investment. Measuring the degrees of responsiveness and the distribution of gaps and disparities that are instrumental in informing effective strategies of business attraction and retention is the principal task of this element of the ALERT model. The findings from this component of the model should be used to brand and distinguish the target city-region and its network of allied city-region partners in this initiative to strengthen their individual and collective international competitiveness for attracting foreign business and investment.

The Task of Talk. This task is labeled "talk" to bring home the point that discussion, dialogue, and debate need to be occurring across the traditional old economy boundaries between business, governments, nonprofit institutions, organized labor, and individuals; further, embedded in the intent of the "talk" label is the ongoing nature of such essential cross-sectoral interaction. After having executed and fleshed-out fully each of the earlier four ALERT components (i.e., Awareness, Layers, E-Business, and Responsiveness) of the model, the preconditions will have been established to enable an effective policies-planning effort. The Talk component is a policy-planning effort that must focus on the future, and especially the intended, the desired foreign-investment future. This is the stage and element of the ALERT model dedicated to strategizing for foreign business and investment attraction when policies must be debated and planned for desired futures. These planning scenarios are intended to catalyze discussion and debate among the principal stakeholders of the urban core mayors and their city-region constituents. From such give-and-take about alternative strategic futures, specific operational steps should be planned and implemented to move forward each of the individual thirteen urban core city-regions and the collective network (i.e., metroMichigan) of these urban areas to realize their visions and aspirations for successfully attracting businesses and investments from outside the U.S. Such visions and aspirations will drive the formulation and crafting of the needed locally tailored public policies.

The individual city-region and its other partners in the urban core mayors network need to be clear about their respective goals for attracting foreign business and investment. One of the most important reasons for this task is that such attraction, at its essence, is a matching process. In order to be successful in attracting inward foreign investment, both the foreign investor and the recipient metroMichigan city-region need to have their respective interests addressed and met, and the action steps taken must result in a working convergence of these common interests.

Another stimulant source for planning scenarios that should be consulted for futuring and for generating tested development ideas is the *FDI Magazine* that is a product and service of the *Financial Times*. For example, in 2007, *FDI Magazine* conducted a benchmarking exercise into "North American Cities of the Future for 2007/08;" it produced rankings from the increasingly integrated marketplace of the United States, Canada, and Mexico. Chicago headed the most recent ranking of the North American cities of the future (Finger, 2007). Analysis of such futures-ranking methods can be expected to suggest innovative thinking for enriching planning scenarios for the future in the case of Michigan core urban areas (cf. Economist Intelligence Unit, 2007).

Knowledge exploration of the literature on local economic-development-market oriented strategies that do not rely on federal resources also can be used to stimulate applicable policies formulation. Clarke and Gaile (1998) have identified forty-seven such strategies derived from over one-hundred communities. Clarke and Gail further identified eighteen additional strategies from an earlier survey. After initial review, many of the strategies can be selected for further assessment to determine their relevance to particular urban Michigan contexts. For example, tax reforms may play an important role in enhancing the business and investment attractiveness of localities. Were Michigan leaders and stakeholders interested in taking forward tax innovation, Charles Ballard, author of *Michigan's Economic Future*, has laid out a tax reform agenda that should be consulted and thoughtfully considered for policy planning purposes (Ballard, 2006).

An active network of the state's urban core areas may have in the aggregate, other business and investment attraction goals different from, but compatible with particular places of the network. This is the strategic context for Michigan's urban core cities to pursue a strategy of attracting businesses from outside the United States. The Layers discussion, above, illustrates the broader context that a foreign-investment strategy should be one part of a cluster of a multiplicity of future development strategies. In constructing such a comprehensive strategy of economic development and international competition, ideally it should be couched within the broader suite of general business attraction and marketing strategies such as the six strategies that are listed above. This would facilitate coordinative and collaborative linkages, synergies, and the likely realization of economies of scale.

Brand

One of the challenges of a global economy is that cities and regions must develop an identity in a crowded marketplace. Also, the shift in interest away from countries to cities and regions means that the number of competitors is far greater now than in the past. This stage of the analysis focused on two related elements of city branding: identity and Web presence. In a global marketplace for location and investment, the Web is an essential tool in any city's planning to be globally competitive. The websites of Michigan's cities were analyzed for brand identity and content associated with global business and investment.

Web site analysis included the state of Michigan and MEDC, plus the major cities and counties in the state. The perspective of the analysis was that of an overseas investor seeking information about Michigan cities and access to economic development expertise. In general, Michigan's cities tended to have only a limited Web presence, and therefore represent a limited window for the rest of the world to see the benefits of a Michigan location. Among the findings of the analysis are:

- Websites did not present a global perspective. No site contained content other than in English, and only one site had a link to online language translation software that would render the site useful in sixteen languages.
- Generally, cities were good about having a link on their home page that took visitors to business and economic development Web pages. Counties tended to have less well-developed business-oriented access. In many cases, however, visitors to the website had to spend time searching for information and trying to organize the information they found, rather than have it presented to them in an organized way.
- While links to economic development were found on the home page, finding information was often difficult, as it was not organized from the perspective of the investor. Again, cities were easier to navigate than county websites.
- In terms of content, the best websites included information such as business guidebooks, workforce and labor market information, training services, job and career portals, details of and links to state programs, export assistance, economic assistance, location factors and advantages, and discussion of quality of life. Most websites had some content, but the quality and detail varied greatly.

Of the major cities in Michigan, the following general assessments of websites were made (city name omitted):

- "Very well-designed websites but not very easy or clear to find economic development information."
- "There are no particular pages for businesses or visitors and the website presents as oriented only to the state/ national market. Not a friendly interface for visitors."
- "The website mimics the organization of government and not the needs of visitors. Website lacks dedicated business information and the economic development content is not well presented or well organized."
- "Not easy to get to economic development information, and no clear information about financial assistance."
- "A well-designed website with a lot of information presented in an easily accessed format; a lot of business-related statistics and useful information under the community profile."

- "A well-designed website, however structured according to city government and not interests of visitors. Difficult to identify the department/agency that provides business information. Focus on current residents, with little for those outside the area of U.S."
- "Mostly oriented to the state/Midwest market with information to serve residents rather than investors or international visitors. Website does not have a friendly or easily accessible interface and lacks a lot of the information found on the better city websites."
- "The site lacks a lot of economic development information, and seems to focus solely on residents."
- "There is no page dedicated to businesses, and seems to cater mainly to the city's residents."

The Web is very much under-utilized by cities as a marketing strategy or source of interaction with potential investors. Among the general findings of our study were the lack of global awareness and international content on websites, which signals a lack of familiarity or interest by Michigan cities in global business. It is often difficult to quickly find economic development information and contacts on websites, giving the incorrect impression that there is a lack of interest in these activities by Michigan cities.

Developing awareness of Michigan cities and their economic advantages is an important step in becoming globally competitive. Suggestions for cities and counties to consider include the following:

- Promote an identity for each city based on core strengths that can be supported with hard facts about economic advantage. With so many cities engaged in economic development it is important to consider ways to brand locations and make them stand out from competitors.
- The Web is the world's window on Michigan's cities, so it is essential to see a city's website as a valuable asset. Cities should develop portals or sites that feature economic development and global competition assets.
- Create multiple portals for different audiences, to better reach the specific interests of citizens, visitors, investors, etc.
- Consider non-English language content to signal awareness to potential investors and visitors. In a world where English is the leading language of business it is important to show an openness to the rest of the world through websites that feature translation or offer summaries of city characteristics and benefits in multiple languages. Foreign language content will also allow a city's website to be picked up by non-English language search engines.

Compete

There is not a specific formula for a city to be globally competitive. There are many elements to consider, and firms look at a bundle of attributes for each location when making investment decisions. Also, each firm has different needs, so a city may not be competitive for one firm or industry, but may be perfect for a different business. Global competition at the national and city/region level is widely analyzed, with many indices using a variety of measures to capture relative standings, such as the World Economic Forum and the U.K. and European Competitiveness Indices. Each index of city or country competitiveness has a slightly different regimen of measures, but many factors are common across all indices. The major factors commonly included will now be explained.

Almost without exception, the leading attribute of competitive cities is the quality of its workforce. Cities represent concentrations of workers, and the abilities of those workers determine, in most cases, the success of the location. Commonly termed "human capital," this factor encompasses the skills, education, and training of the local workforce, and its attitudes and organization. Human capital as a competitive element is complex, going beyond skills to also reflect labor costs and benefits, unemployment, current and future labor supply, and the nature of industrial relations. Related to human capital as a skill set is the productivity of workers, firms, and industries. Productivity relates the cost of production with output, noting that high cost cities can also be very productive. Focusing on costs alone without including output may cause highly productive states like Michigan to seem less desirable than they are.

Knowledge and innovation are highly valued in an information-based economy, so access to research and development, education, and having an entrepreneurial mindset combine to make a city attractive to a global investor. Measures would include education levels of the population, scale and scope of government, private and university research and development (R&D), and the environment for startup firms.

Cities, regions, and states have under their control many factors that shape global competitiveness. The regulatory environment varies by industry and place, but clear policies and guidance through permissions can change perceptions and attract investors. The challenge for cities is the trade-off between safety and well being of residents and workers against firms seeking less regulation over their production. A second element under city influence is infrastructure, the physical foundation on which an urban economy is built. The quality of road, rail and air connections, as well as water and waste systems will influence a firm seeking a Michigan location for an enterprise that operates globally.

Finally, an important dimension of competitiveness is amenity and quality of life issues for workers and firms, especially in knowledge industries. Cities that offer strong amenity conditions (environment, entertainment, education, cultural resources etc) and reasonable housing and living costs will be globally competitive.

The rankings that result from competitiveness indices suggest ways metroMichigan can stimulate and inspire ideas for global positioning, and allow cities to distinguish themselves from each other. In other words, what strategies and factors of attractiveness are best suited to enable core cities in Michigan to effectively attract businesses from outside the United States? These generic illustrations can assist in providing answers to this question.

- Promoting leading universities, transportation links, hospitals, international schools and heritage. Also important is cost effective and efficient telecommunications and Internet access.
- Announce investment results to inform the public of new jobs and firms in the city.
- Public commitment to action, such as a development agency, or a promotional team that clearly explains investment incentives, overall heritage attractiveness, hospitals, housing, and universities.
- Recognize quality of life factors, and new urban initiatives such as the transformation of an industrial quarter into a new technological district, high-speed trains, and an integrated and expanded port.
- Recognize cost advantages, such as rent, labor, transportation, etc.
- Having a city or regional economic development strategy with resulting public investment projects can contribute to competitive rankings.

Since 2002, Robert Huggins Associates in the United Kingdom has conducted and published four rankings that measure and index “world knowledge competitiveness” (Huggins, Izushi, & Davies, 2005; Huggins et. al., 2004; Huggins et. al., 2003; Huggins & Izushi, 2002; data available at http://www.cforic.org/downloads.php). These World Knowledge Competitiveness Indexes have special relevance to the Michigan urban core cities. In each of these four published rankings, the Grand Rapids city-region and the Detroit city-region have measured relatively highly in knowledge competitiveness in the global economy among, in the most recent report, 125 city-regions of the world. In promotional and attractiveness terms this is noteworthy and should be considered by each and all of metroMichigan’s urban core cities in formulating strategies and policies of economic development and international competition.

To illustrate this approach here, the *City Vitals* indicators are used, and the Huggins Associates competitiveness index are referenced. In actual real-world operation, more and diverse metrics would need to be considered and used for even more representative variables to portray a city-region’s investment attractiveness and competitiveness challenges.

For the Detroit city-region as a whole, it presents a traditionally strong set of business and investment attractiveness factors. Refer below to the Appendix, see the variables that comprise the 2005 World Knowledge Competitive Index; these variables reflect the economic assets that have resulted in Detroit’s 15th-place ranking globally. As the origin region of the world for “the machine that changed the world” (i.e., the automobile), this urban area offers would-be foreign investors both opportunities and challenges in the new context of the global knowledge economy. The city-region’s experience in, and organization of manufacturing production and management have been world-class; as the human capital of the urban area works at re-establishing its global competitive edge, these re-thinkings and shifts in business models will offer new opportunities for business investments and investors who want to add their external innovation and creativity to the locally based mix of stakeholder investors.

The legacy, especially of the auto manufacturing infrastructure and its organizational network of producer-business services and suppliers of the Detroit city-region, is also reflected in the relatively competitive position and the possible opportunities of the urban area on the *City Vitals* variables. For example, the area ranks nationally as follows: 11th on Creative Professionals; 16th on Foreign-Born BA or Higher; 10th on Patents; 18th on Small Business; 11th on Voting; and

17th on International Students. It should be noted further, the importance of the role of local human-capital development investment in higher education, and higher education that attracts students from outside the U.S. The Voting variable is suggestive further of a relatively active local civil society.

Some of the key challenges and somewhat contradictory measures, when compared to the investment opportunities discussed in the preceding paragraph, that are identified by the *City Vitals* research include: middling to poor performances on the College Attainment variable (36th nationally); the Young & Restless variable (25th nationally); the Venture Capital variable (33rd nationally); the Entrepreneurship variable (37th nationally); the Community Involvement variable (24th nationally); the Transit Use variable (36th nationally); the WiFi Hotspots variable (49th nationally); the Culture/Cable variable (35th nationally); the Restaurant Variety variable (44th nationally); and the Movie Variety variable (35th nationally).

For the Grand Rapids city-region, analogous to the Detroit urban area but with different loadings on the variables from *City Vitals*, there are patterns of indicators that are suggestive of both foreign investment and business attractiveness and challenge. Refer below to the Appendix, see the variables that comprise the 2005 World Knowledge Competitive Index; these variables reflect the economic assets that have resulted in Grand Rapids' 6th ranking globally. Compared to the Detroit metropolitan region, the population of the Grand Rapids metropolitan region is much smaller, with a different economic and social history. Consequently, its metrics are inherently and somewhat different from the Detroit regional investment and development context.

The legacy of the Grand Rapids city-region, as measured and ranked via the *City Vitals* variables, has resulted in the following patterns of opportunities for relative attractiveness to foreign investment and business. The area ranked nationally as follows: 3rd nationally on the Voting variable; 3rd nationally on the Community Involvement variable; 2nd nationally on the Economic Integration variable; 26th nationally on the Small Business variable; and 18th nationally on the Weirdness variable.

The challenges facing the Grand Rapids city-region that can be derived from assessing the *City Vitals* indicators are numerous and are measured and ranked as follows; it should be noted that this west-Michigan metropolitan area loads generally poorly nationally. The urban area ranked nationally as follows: 39th on the College Attainment variable; 42nd on the Creative Professionals variable; 35th on the Young & Restless variable; 42nd on the Traded Sector Talent variable; 50th on the Foreign-Born BA or Higher variable; 42nd on the Patents variable; 49th on the Venture Capital variable; 42nd on the Entrepreneurship variable; 41st on the Foreign Travel variable; 48th on the International Students variable; 41st on the WiFi Hotspots variable; 35th on the Culture/Cable variable; 45th on the Restaurant Variety variable; and 35th on the Movie Variety variable. Of the 20 *City Vitals* variables, the Grand Rapids metropolitan area loads in the 30s, the 40s, and 50th on 14 of the 20 indicators. The relatively poor-to-modest showing from this research contrasts sharply with the strong global competitiveness rankings from the Huggins Associates research. An important part of the Grand Rapids' modest *City Vitals* rankings is a function of not having a major research university and by being one of the smaller U.S. city-regions, among other factors.

Global Positioning

In general, metroMichigan should consider a wide range of factors when positioning itself globally. The prime focal points should be: (1) human capital development; (2) culture of enterprise, entrepreneurship, and innovation; (3) governance in terms of public- and private-sector structures and major programs; (4) equity and disparities in terms of income, education, and access to ICTs; and (5) mindset for planning for change. These five lessons from analyzing locally based and city-region scaled global knowledge economy development around the world are important instrumental factors in city development. Progress on these factors can enable mayors, other leaders, policies planners, and stakeholders to assess and evaluate the status of mindset change and thereby take the measure of the transformation of the localities from pre-foreign investment strategic performance to post-foreign-investment strategic performance.

Human Capital Development. In order to have any significant level of competitiveness in attracting business and investment from the global marketplace outside of the United States, metroMichigan leaders and stakeholders must place highest priority on developing and retaining talent that will advance the kind of economic functions to be promoted for this region of urban areas (cf. Coletta, 2007; Joseph Cortright Impresa Consulting, 2006). In today's era of human capital criticality (Reich, 1983), this is quite a serious problem for the region and the State of Michigan. Support for the state's research universities and its other higher education institutions, including its community colleges, has not been as forthcoming as is needed to convey to would-be foreign investors that Michigan is a business environment that has knowledge economy talent development as one of its highest future development priorities (Miller, 2007). Bond issues in support of local schools need to be supported. Basic and advanced school-based education in science, mathematics, technology, and in creative fields such as art, design, performance, and literature must be enhanced and sustained. Such support needs to span the human development life-span from early childhood nutrition and pre-school investment through to graduate school and in-service job training and education for targeted adult training needs. Further, job creation, job retention, and related experts need to be mobilized to work with the state and metroMichigan region leaders to address the problem of the high degree of mobility of locally educated talent (i.e., the "leaky bucket dilemma").

> The costs, processes, and returns from investments in human capital are "inescapably social." The logistical difficulty of capturing returns complicates investment in developing human capital. The mobility of human capital, its flexibility, its 'non-ownability' and the long time lags involved before returns are realized serve to discourage local public and private investors. (Clarke & Gaile, 1998, p. 193)

While Michigan's state government and the communities that have been awarded Cool Cities grants have demonstrated some noteworthy initiative to retain young persons who have been raised and/or educated in Michigan, this step should be seen as a first step of a long and badly needed journey. Follow-up steps to be considered are to have Michigan's urban core mayors and other leaders of the metroMichigan regions formulate a comprehensive strategy of city-regional human-capital development that demonstrates a high-priority commitment across the life-span, from pre-natal care, to early childhood nutrition, to pre-school, to K-12 schools, to community colleges, to four-year colleges and universities, and crucially to research universities (Kirp, 2007; Lynch, 2004).

Recently, on the occasion of Volkswagen moving its North American headquarters from Michigan to Virginia, the relatively uncompetitive talent environment of Michigan was cited as the principal impetus for this move. Commenting on this, former Michigan superintendent of schools Tom Watkins has written that the Michigan legislature (and we would add the state's mayors) should:

> Measure every policy decision they are about to make against what their actions are doing to make Michigan the Talent Bank of the world. Are we investing in educating our youth and retraining our existing workforce? Are we setting policies that will retain the talent that currently resides in Michigan and are we fostering policies and laws that will make Michigan a world-wide talent magnet? We need to realize that if we are not, our neighboring states and global competitors are . (Watkins, 2007)

Closely related to the imperative for the highest policy priority for all levels of Michigan decision-making for robust investment in talent development and retention, is the long-term need to develop and establish an enterprise culture throughout the state and especially in the metroMichigan regional network of urban core areas.

Enterprise Culture. In this context, enterprise culture is an attitude that is widely recognized and dominant in behavior throughout a city and region; these behaviors have the characteristics of risk-taking, entrepreneurship, imagination, creativity, and innovation to be successful in economic profitability and in the capacity of a community to anticipate, to adapt, and to be agile and flexible in relating to external forces of change.

Recall that all business is not equal. Alan S. Blinder's theory of differential offshorable and non-offshorable occupations should be considered explicitly when planning foreign investment and business strategies (Blinder, 2006; Wessel & Davis, 2007). Highest priority should be considered for attracting inward foreign investment that is likely to generate jobs the occupations of which are least vulnerable to being temporary or ephemeral because of the greater likelihood of offshoring. These occupations include, but are not limited to: general and operations managers; stock clerks and other filers; shipping, receiving, and traffic clerks; and sales managers. The criterion of differentiation here is that those services that require personal, often face-to-face proximity (e.g., physicians and hair-dressers), are least subject to offshoring. Alternatively, those services that can be delivered and exchanged over distance electronically are more subject to potential offshoring. Following-up on the principle that one should be organized to realize the mission, the city and its region should consider forming an organizational entity, the mission of which is to ensure that the locality engages its business community, and among other interests and institutions, its research university, in “helping lead the community’s business and governments through the shift to the global economy” (Opinion, 2007). Lansing leaders recently launched such an organization: the Lansing Economic Area Partnership (LEAP). LEAP will be collaborating with others whose job it is to promote innovation and entrepreneurship. Already LEAP has begun a process of transformation by identifying the powerful development potential of the area, with the expectation that new businesses will be attracted to, and existing enterprises will be retained in the Lansing area (Opinion, 2007).

In its history, Michigan has demonstrated early and extraordinary inventive and innovative behaviors that served to make this local economy the heart of the global automobile industry and a productive contributor to other industries in the manufacturing sector. At this stage in the evolution of Michigan’s business culture, the question is can the leaders and the workforce of the cities and regions of the state re-invent themselves to be highly competitive again, but this time, under the new conditions, the new ascendant economic functions and new demands of the global knowledge economy and network society? If the answer is to be yes, then it will require the development of strong, entrepreneurial local firms comprising a business community with robust established local support institutions and a climate that attracts and retains the top talent of the workforce. These entrepreneurial attributes attract FDI (Lagace, 2002). In tandem with human capital development,

> …the [enterprise culture] literature repeatedly underscores three characteristics. One is youthful dynamism and entrepreneurial risk taking. They are the source of energy, new starts, productivity in the workplace, and high savings that are transformed into complementary physical capital. A second is the level of skill and how rapidly the composition of skills can be varied in response to market demands. A third is creativity, which is associated with skills and level of education, but whereas skills are correlated with productivity and efficiency, creativity is linked to innovation. (Yusuf & Nabeshima 2006, p. 81)

A core challenge, therefore, is for the mayors, leaders and other stakeholders of the cities of metroMichigan to work with others in the state on a sustained-commitment basis to enable Michigan’s enterprise culture to overcome its recent collective history of risk-averse performance and relative lack of innovation in key sectors of its business, labor, government, and institutional cultures. The ingredients for making such a transformation have been outlined here; without their mobilization, one cannot expect a general pattern of success in attracting foreign business and investment to these core cities. As new planned actions and programs for strengthening an urban area’s enterprise culture are initiated, it will be important to benchmark, monitor and evaluate progress and the status of these efforts. The World Bank has resources that are available to assist in benchmarking business environments (World Bank, n.d.).

Governance. In addition to developing individual-city strategies, foreign investment policy planning for Michigan’s urban core cities should consider taking advantage of their collective competitive assets. For example, investors around the global economy can be influenced by rankings of various development related themes. Competitiveness, and especially competitiveness within the context of the knowledge economy, is a particularly relevant theme for the development of effective future international advantage. Our working definition of governance here involves inventing “modes of organization and practice through which collective affairs are managed” (Healey, 2003; Healey, 2007; Corey & Wilson, 2006, pp. 201-202). Governance includes governments, but goes beyond to embrace and engage the other major interests and stakeholders of each city-region (for elaboration of institutional and organizational issues, see Prakash, 1999). As noted above in the segment on Stakeholders and Organization, a governance mechanism that might be considered by the urban core mayors to facilitate the advancement of their interests in attracting business and investment from abroad would pool the existing foreign investment, business attraction, and related expertise and capacity that exists across the thirteen-city network. Such a governance strategy would seek to complement the respective strengths across the metroMichigan region. For example, glimaWest has experience in promoting the Grand Rapids city-region; this might be a special source of best practice from which the other city-regions of metroMichigan might learn for local tailored application. Similar potential complementarities might be inventoried across the thirteen-city region so as to be prepared systematically to take advantage of the collective good practices that can advance foreign business investment locally. Continuous coordinated planning and liaison in implementation are essential and will require new disciplined behavior and practice among those assigned these critical responsibilities. Globally competitive places have human resources who routinely practice and perfect such inter-organizational and inter-institutional strategic behavior.

Equity. The goal here is to enhance social justice, strengthen disparities in development opportunities, and attain social cohesion. That means that there needs to be a commitment to the reduction of spatial socio-economic-technology inequalities. Should all of the intelligent development aspirations inherent in this paper be realized, it will not be good enough; there might be significant unevenness in the distribution and location of the benefits of such development. Consequently, a high priority in policies planning and implementation must be placed on social justice, technological justice, and the attainment of social cohesion (i.e., the reduction of spatial and socio-economic inequalities). The economically distressed communities and individuals of Michigan's cities and regions must receive effective policy attention and domestic investment. Attractiveness to foreign business investment will be undercut were the metroMichigan region continue to have significant development disparities among the city-regions' households, businesses, and institutions. For example, universal access and cost patterns associated with the use (or non-use) and full embracing of the Internet and other ICTs need to be rectified and sustained. Wireless Washtenaw and Wireless Oakland, for example, might be considered for modeling throughout metroMichigan and the rest of the state (Corey, Wilson, Helmholdt, & Frederick, 2005). Wireless Washtenaw states on its webpage, that it "is a county community coming together to provide free or lower cost access to the Internet for anyone in Washtenaw County, regardless of their location or economic status" (Wireless Washtenaw, 2007); Wireless Oakland also offers a portion of its wireless Internet services free. Another and relevant goal for Oakland County is to support the integration of high-tech investments in local governments (Wireless Oakland, 2007). In general, then, equitable distribution of intelligent development opportunities and benefits will result in the improvement of higher levels of overall economic productivity and enhanced competition for business investment from abroad. The Responsiveness component of the ALERT model is the opportunity strategically for policy makers, stakeholders, and their planning to address identified gaps in market demand and societal need.

Mindset Change. It needs to be recalled that the state and the places of metroMichigan did not just suddenly awake one morning and discover that these local economies were no longer as competitive, as productive, as profitable, and as prosperous as they once had been seen to be. This change took a long time in coming. For well more than a human generation, the corporations, the governments, the institutions and the people of Michigan have been content to allow "active inertia" to prevail. This is Harvard University Professor Donald Sull's relevant concept…

> …wherein leaders and managers of firms remain so committed to past approaches and strategies that have been successful for them, that they are unable to change with the times. Sull has developed operational actions that are intended to change status-quo behavior; these include strategic frames, relationships, processes, resources and values. (Corey & Wilson, 2006, p. 210; cf. Sull, 2003; 1999)

Economists speak of path dependence, that is, current and future human behavior, the trajectory of which is observed to be dependent on the path of the past (Corey & Wilson, 2006). In order for metroMichigan leaders and stakeholders to chart a new, more outward looking, open-minded global intelligent development path in general, and specifically to attract foreign business and investment, a new pervasive region-wide mindset will be required. Fragmented, piecemeal approaches to foreign business and investment attraction is a pathway to failure. The changed mindset should embody the characteristics and behavioral traits of intelligent development, that among other elements includes investment in places and regions for wealth creation, higher wage employment, and improved quality of life via human capital development and enterprise culture development.

It should be clear to all that needed mindset change will take a great deal of time and sustained effort to be realized. It took a long time for Michigan and its cities and regions to get to its present state of development and relative competitive position. In turn, there should be every expectation that it also will take a great deal of time to change the metroMichigan mindset sufficiently to realize the kinds of futures that will be desired and intended. Howard Gardner has outlined the kinds of methods and actions that can be used to affect such mindset change (Gardner, 2006).

Policy Direction

Based on our knowledge of what makes for successful global positioning and foreign business investment, our position is that public policies are but one part of a complex equation that can lead to success. In particular, it is important for public and private partnering that leads to joining in strategizing and complementing each other's special resources in collaborative efforts to attract additional partners from abroad (Clarke & Gaile, 1998). Under this conception, private-sector and nonprofit-sector policies (i.e., corporate policies) also need to be integral to collective community effort at business attraction.

Clarke and Gaile have defined the “fourth wave of local policy initiatives [that] will center on linking localities to global webs and investing in human capital” (Clarke & Gaile, 1998, p. 9). They have identified eighteen policy suggestions organized into three categories. They also identified forty-seven market-oriented strategies that are not reliant on federal government resources (Clarke & Gaile, 1998). One may use these sixty-five would-be policies and actions as a kind of check list to ensure that a comprehensive analysis of business and investment attraction actions have been considered for local applicability and prioritization.

One conventional stream of logic is to target foreign investment attraction strategies toward locations that already are making investments in Michigan. From the Awareness discussion above, it may be recalled that the top five FDI source countries as measured by number of FDI projects invested in the United States are Japan, Germany, the United Kingdom, Canada, and France. Another strategic stream of logic is to target sources that have knowledge of the U.S. business market in general, but are not yet among the top foreign investors in Michigan. For example, after Canada, China, and Mexico are the second and third highest general international trading partners of the United States. They might represent potential and profitable sources of FDI for Michigan as well. This jibes with the top five countries supplying U.S. imports, Canada, China, Mexico, Japan, and Germany.

It is important to make strategic and creative use of the information and evidence that was compiled in the Awareness component of the ALERT model process. An early strategic assessment of China’s potential for inward business investment to the cities of metroMichigan should be conducted. For example, China is well known as a major global recipient of foreign direct investment from outside China. China has been so successful and profitable in this regard that it has been able to accumulate huge foreign exchange reserves of $1,400 billion USD. Already, as part of its development maturation, China has begun to scan the global economy beyond its borders in search of places to make strategic and profitable investment. It is a relatively small supplier of FDI at the moment; recently China has been estimated to have assets of around $45 billion USD with annual outflows of $5.5 billion USD (Winters and Yusuf, 2007). These investments have been principally in Asia and Latin America, with growing outflows to Africa. China is ensuring its future access to fuels and other raw materials and commodities.

Consequently, one can envisage planned strategies such as short-term cultivation and promotion of potential investors to metroMichigan from Western Europe (e.g., Germany, U.K., France, the Netherlands, Italy, and Ireland) and from Japan, Abu Dhabi, Singapore, and longer-term cultivation and outreach to the emerging giant economies of China and India. Medium-term attention might be considered and planned for the other East Asian economies noted several paragraphs above (e.g., Taiwan, Hong Kong, and South Korea). It is critical however, that the close monitoring, research, and planning for formulating such targeting and matching should begin immediately. Special attention needs to be devoted to Hong Kong. Recently, China announced that Chinese investors located in the Tianjin Binhai New Area will be permitted, on a trial basis, to make investments through the Hong Kong share market to locations overseas. This scheme is a way for China to relieve its large volume of foreign reserves liquidity. The scheme remains to be approved. Further, some informants have reported that investors from Beijing, Shenzhen, and Shanghai might also be permitted to invest in Hong Kong stocks (Fong, 2007).

In order to be able to conduct effective intelligence gathering and monitoring activities metroMichigan and its member cities must mobilize for attracting foreign business and investment. Similar to countries that have long experience in such work and in prospecting research, there will need to be organization and coordination mechanisms devised and employed. Drawing analogies and lessons from other investment agencies from abroad and in Michigan (e.g., Singapore and Automation Alley), are recommended.

It should be noted that perception of and confidence in U.S. currency can be an important factor here. At the present time, the declining dollar and the pace of that change needs to be taken into account in strategic analysis and scenarios planning for foreign investment. Further, the current decline of the U.S. dollar is not the same for all regions around the global economy. The economy of the Eurozone and the Asian-currency economies that are pegged to the U.S. dollar differ. Such variations also must be considered in scenario planning. Of course, none of these macro-forces can be controlled by the cities of metroMichigan, but these factors, their trajectories, and locational distribution across the global economy should be included in the policies planning and the analyses that will inform the future scenarios.

Lastly, each mayor should consider taking at least two steps as a way to initiate action to enhance his or her city's foreign business and investment attraction position: (1) a foreign investment attraction unit, or at a minimum, a person, in whole or in part, should be assigned to be the point person to pursue this mission, and (2) a strategic planning process should be initiated to enable this mission to be advanced. This process should result in a working plan that is dynamic and subject to continuous updating and improvement. If such a plan already exists for a core city, then it should be re-visited on the occasion of this paper and the discussion that it is intended to stimulate. An effective strategic planning process, especially if it produces new policies, requires continuous monitoring and periodic evaluation as to what degree the policies are meeting the intended outcomes and milestones.

Conclusions

Inward foreign investment is a relatively new and a generally little practiced endeavor for policy makers, policy planners, and other stakeholders in Michigan's core urban areas. This paper has been prepared as an introductory self-teaching and self-learning tool to enable local investment strategists, local stakeholders, and policy makers to have some stimulus for inventing and initiating their own individual city strategies and for constructing collective multiple city-region strategies for future intelligent development stimulated in part by foreign business investment. To facilitate the self-learning process, this paper has offered the conceptual framework of the ALERT model and the companion book, *Urban and Regional Technology Planning: Planning Practice in the Global Knowledge Economy* (2006) as additional support for executing the task of planning for policies to assist in attracting inward foreign investment.

It should also be noted that much of this work should be driven by common sense. For example, conventionally, when businesses and investors consider making investments in economies of the developing world (i.e., the so-called "third world"), a great deal of attention is given to the stability of the place where they are contemplating an investment. There is an analogous lesson for us as we analyze the situation of investing in Michigan cities today. One must ask the fundamental question, would you invest in places in a state that is not competitive in its support of its universities, especially when compared to its neighboring states (Miller, 2007; Andrews, 2007)? Ask yourself another basic common sense question, would you invest in a state that cannot pass a state budget on time after months of deliberations? With 70 percent of the state's critical cohort of 18-24-year-olds saying that they would leave the state if they had the opportunity, does this portend well for inward foreign investment to Michigan urban core areas? (Robinson, 2007). The lesson must be that Michigan leaders and stakeholders, its cities and its regions, have a great deal of work to do; they must be imaginative and strategic in solving these problems; they must be co-investors, and unified and functional enough to avoid being destructive of the public interest. There are many other places that do not have these obstacles to becoming attractive and competitive recipients of foreign business and investment, and Michigan's core urban areas have to compete with these other, more advantaged, places.

This paper therefore has illustrated a practical action pathway (i.e., using the ALERT model) for Michigan's urban core mayors and their stakeholders to be empowered to attract businesses and inward investment from outside the United States to their respective cities. The approach taken here has been to offer the means; it remains for the leadership of the mayors to ensure that the ends are devised that will operationalize the details of constructing and following the proffered pathway. Each city's mayor must cause two major organizational tasks to be undertaken: (1) initiate the process and organization necessary to enable their city to attain the capacity for autonomous and independent foreign business and investment attraction, and (2) coordinate with the mayors of the other urban core areas to explore the foreign business and investment goals that the thirteen city-regions may have in common. The goal of this exploration should be to determine the interest and feasibility of creating an alliance of the thirteen urban core cities to pool and complement their collective foreign business and investment expertise and experience for the benefit of the metroMichigan region as a whole.

CEOs for Cities' President and CEO Carol Coletta recently stated during a talk in Lansing, "smart cities are attracting smart people," city-regions not doing this increasingly are relegated to a "have-not" position in today's global knowledge economy and network society (Coletta, 2007). This paper will be considered "successful" if it contributes to the urban core areas of the metroMichigan's region ultimately being in a "have" position in the not-so distant future of the global business investment environment.

In the end, the message implicitly to be conveyed by the urban core areas to would-be foreign business investors might be motivated by sentiments such as this:

> …we invite you to join with us as we seek to make a full, successful, and profitable transition into the global knowledge economy. In order to accomplish this, we are working on changing our mindset so that, increasingly, our cities are embracing and taking up the attributes of the new global economy and network society. We are progressive, tolerant, and proactive to innovation and creativity as explicit factors that are important to our future development. We are engaged in these intelligent development strategies planning for the long-term and on a sustained basis. We welcome partners who are similarly inclined to join us and to benefit from the excitement of creating new development and business opportunities.

To the urban core mayors, the key task ahead therefore, is to organize, and using the suggestions offered here combined with your own creativity, you are encouraged to invent the unique place-specific approach to attracting inward foreign business and investment that is appropriate to and effective for your particular city-region.

Appendix: Support

This appendix includes elaborative material on selected issues that are discussed more briefly in the main body of the text above. The intent is to keep the core narrative relatively free of too much detail so that the principal message is communicated as straightforwardly as possible, while at the same time providing additional information in support.

The 2005 World Knowledge Competitiveness Index is described on the Web site of Robert Huggins Associates (2005) as follows:

The World Knowledge Competitiveness Index 2005 is an integrated and overall benchmark of the knowledge capacity, capability and sustainability of 125 regions across the globe, and the extent to which this knowledge is translated into economic value, and transferred into the wealth of the citizens of these regions, utilizing 19 knowledge economy benchmarks, including employment levels in the knowledge economy, patent registrations, R&D investment by the private and public sector, education expenditure, information and communication technology infrastructure, and access to private equity. The World Knowledge Competitiveness Index 2005 is the only existing instrument that benchmarks such regional performance at a global level, with the index comprising of 55 North American regions, 45 from Europe and 25 from Asia-Pacific.

The variables that the 2005 World Knowledge Competitiveness Index Robert Huggins Associates used to benchmark the city-regions of the world knowledge economy are (Huggins, Izushi, & Davies, 2005):

Human Capital Components

- Economic Activity Rate
- Number of Managers per 1,000 Inhabitants
- Employment in IT and Computer Manufacturing per 1,000 Inhabitants
- Employment in Biotechnology and Chemicals per 1,000 Inhabitants
- Employment in Automotive and Mechanical Engineering per 1,000 Inhabitants
- Employment in Instrumentation and Electrical Machinery per 1,000 Inhabitants
- Employment in High-Tech Services per 1,000 Inhabitants

Financial Capital Components

- Per Capita Private Equity Investment

Knowledge Capital Components

- Per Capita Expenditures on R&D Performed by Government
- Per Capita Expenditures on R&D Performed by Business
- Number of Patents Registered per One Million Inhabitants

Regional Economy Outputs

- Labor Productivity
- Mean Gross Monthly Earnings
- Unemployment Rates

Knowledge Sustainability

- Per Capita Public Expenditures on Primary and Secondary Education
- Per Capita Public Expenditures on Higher Education
- Secure Servers per One Million Inhabitants
- Internet Hosts per 1,000 Inhabitants
- Broadband Access per 1,000 Inhabitants.

The population of Michigan's metropolitan areas and urban core cities

Table 1
Population of Michigan's Metropolitan Areas and Core cities

Detroit-Ann Arbor-Flint metro area		5,456,428
	Detroit	886,671
	Ann Arbor	114,024
	Flint	124,943
Grand Rapids-Muskegon-Holland metro area		1,088,514
	Grand Rapids	197,800
	Muskegon	40,105
Battle Creek city		53,364
Bay City city		36,817
Dearborn city		97,775
Jackson city		36,145
Kalamazoo city		77,145
Lansing city		119,128
Pontiac city		66,337
Saginaw city		61,799

Sources: Joseph Cortright Impresa Consulting (2006); Mileage-Charts.com (n.d.)

Theory in Assisting the Planning of Policies

Given the increasing complexities of the global knowledge economy, strategic planning and policies planning practitioners are urged to become knowledgeable about and use theory. For the purpose of attracting foreign business and investment to the urban core areas and the metroMichigan region, location theory and regional competitive theory especially are relevant and critical.

It must be noted, however, that these theories are not necessarily definitive. In spite of this, by understanding the degree to which such theories may assist in explaining general analogous empirical situations, theory can be quite helpful in offering the intellectual discipline and a systematic framework for grasping the functional and operational details of some of the factors that are most likely to influence the decision makers for inward foreign business and investments coming into Michigan's urban core areas. In order to illustrate such usefulness, some pro and con discussion is provided.

Location theory for high technology industries: implications for policy planning. In the case of the requirements of these industries, transportation costs are minimal and speed of access is important. "Such industries may also involve complex and costly marketing and servicing operations by specialized and skilled personnel, easy access to major airport passenger facilities will again be essential" (Markusen, Hall, & Glasmeier, 1986, p. 133). These researchers went on to state the following hypotheses about the location factors for such industries (we have deleted some of the less applicable elements so as to tailor the factors to the Michigan context):

1) High tech industry is attracted to major airports with good national and international passenger and air cargo activities.
2) High tech industries are drawn to areas with good natural amenities.
3) High tech industries concentrate in areas offering attractive housing at reasonable prices.
4) High tech industries are attracted to areas with educational and cultural advantages, including good educational opportunities, an array of specialized cultural services, low levels of pollution, and good recreational opportunities.
5) High tech industries are attracted to regions which have low wage rates and high unemployment rates.
6) High tech industries will be attracted to areas with a high degree of internal accessibility and connectivity; for instance, areas with well-developed highway systems.

7) High tech industries will be drawn to areas with a well-established infrastructure of specialized business services.
8) High tech industries are drawn to places which have an anti-regulatory, free-enterprise ideology.
9) High tech industries will be drawn to centers of industrial R&D which will tend to locate close to the headquarters of major industrial corporations.
10) High tech industries will be generated in locations with concentrations of federally funded fundamental scientific research.
11) High tech industry will be generated in areas with high concentrations of defense spending

These locational factors, for the purposes of informing public policies formulation in metroMichigan, should be updated and tailored for the particular local context and to accommodate to the continuously changing technological environment. Further, they should be expanded to include the production and consumption of services as well as the production of goods (i.e., "high tech industries") (Beyers, 2007; Beyers, 2000). The addition of the services should include, among other such functions, financial services (Bogle, 2007) and health care services (Monk, 2007). These are likely to continue their growth trajectory into the future. In addition, it is important to encourage more research into these relatively new and emerging economic functions. What role, for example, do the high and rising costs of health care in Michigan play in influencing investment decisions (Altarum, 2004)? Despite recent conventional wisdom, there is initial evidence that suggests that government-financed health care has made little difference in attracting investment and enhancing competitiveness (Monk, 2007). The need for this kind of place-specific and generic research underscores the importance and the imperative of Michigan public-sector and private-sector leaders to ensure that a program of translational research is initiated and sustained.

Translational research is executed by means of a working partnership and collaboration between practitioner and basic researcher. The goal of such research is to advance, in an integrated and interdependent sustainable manner, the application and new knowledge-generation in the field of inward foreign business and investment attraction from abroad to the U.S., including, explicitly, Michigan and its city-regions. This translational research approach comes from working partnerships between the fields of medical-practice clinicians and fundamental medical research. The U.S. National Institutes of Health has advocated, promoted, and funded translational research. Ideally, the clinician and the researcher function and behave in a two-way, hand-and-glove relationship. The clinician brings to the relationship the needs and questions that arise from everyday practice; in turn, the researcher brings to the relationship theoretical and methodological issues that must be addressed and answered by means of systematic empirical data collection and observation designed to discover findings in response to those practical, theoretical and methodological needs. Mayors and leaders of the urban core cities and the metroMichigan region should consider encouraging the establishment of a program of sustained translational research to advance our unique and collective inward foreign investment requirements. This would entail stimulating working partnerships between selected individuals from the academic and think-tank sector and individuals from the foreign-business investment-practitioner sector. It might function not unlike the current program under which this research paper is sponsored (i.e., from the program entitled "Policy Analysis on High Priority Urban Issues").

Regional competitiveness theory: implications for policy planning. It is worth reiterating that it is the stance here that policies planning practitioners need to incorporate into their practice and be informed by the latest research findings and theory. However, it is the reality that such academic influences are always "in process" and are not necessarily settled knowledge and definitive. This is also the case for our collective understanding of regional competitiveness, that is, this is understanding competitive advantage at the sub-national and within-state scale, such as are cities and their surrounding regions of metroMichigan. Despite the fact that this research and theory are not determinative, there is significant value in understanding the state-of-the-art such as it is. If nothing else, such knowledge demands that the practitioner dig deeply and systematically into the functional and locational details of local competitive advantage, thereby enabling the policy-planning practitioner to be much better prepared and empowered to invent and construct approaches and actions which can be successful in advantaging one's city-region in attracting foreign business and investment. It is helpful here to lay out some of the principal arguments and issues about regional competitiveness.

If there is no generally accepted definition or theory of regional competitiveness, this has not stopped policy makers from devising policies designed to boost the competitiveness of this or that region or city. Just as productivity has been used as the dominant indicator of 'revealed competitiveness,' so it has tended to be a prime target for policy intervention.

(Kitson, Martin, & Tyler, 2006)

In order to offer the mayors and stakeholders of the cities of metroMichigan some background to these issues, we next summarize the literature on competitiveness at the sub-national scale. This literature has documented the drivers of productive performance of a country's regions and cities. For regions, the drivers are skills, enterprise, innovation, competition, and investment. For cities, the drivers vary a bit. They are innovation, human capital, economic diversity and specialization, connectivity, strategic decision making, and quality of life factors (Kitson, Martin, & Tyler, 2006). We assert that it is the commonality among the regional and urban systems drivers that is the lesson to be taken away from this discussion of the literature on city-regional scale competitiveness. Note, all of these drivers are encompassed within the E-Business Spectrum conceptual framework that was discussed above. Further, this literature suggests that there are two essential behaviors if public policies for the realization of competitive urban areas are to be successful in overcoming market and institutional failures. The essentials are that there needs to be: (1) a comprehensive package of policies that are informed by the regional and city drivers in planning and implementation, listed above; and (2) a coordinated approach to the execution of the policies package, such that the beneficial synergies of the drivers are realized, using their known or expected interdependent and sequenced relationalities. Further, effective coordination also includes the requirement that cross-jurisdictional administrative and public policy fragmentation be overcome by means of attaining unity of purpose or intent. Even if these two essentials are in place, there is no guarantee for policy success.

The regional competitiveness literature has identified a number of problems that should be taken into account when employing the coordination and comprehensive policies-planning and implementation of the productive performance drivers approach just discussed. These problems include:

- There is no underlying general coherent theoretical justification for the selection of particular drivers.
- Given that, in practice, most such regional competitive advantage policies are supply-side in nature; this means that city-regions seeking to attract foreign business and investment should put greater attention and effort into the demand-side. This means that local and external demand should be raised such that the locality's goods and services are in demand. Alternatively, the situation to avoid is a low level of local demand, such that local innovation and entrepreneurship are not undercut. Should this occur, it could mean the out-migration of skilled and educated workers who are seeking a better working environment elsewhere.
- The need to avoid taking actions that reflect the belief that drivers produce the same outcomes anywhere. So, place-specific policies must be devised, such that local specificity is designed into strategic planning and policy implementation.
- The appropriateness of spatial scale needs to be determined. Some highly localized policy interventions may enhance competitiveness, while at more regional macro-scales, similar actions may have lesser impact. Thus, more research, at various scales, is needed to provide general lessons and guidance that are likely to strengthen the competitiveness of particular places. Important at this juncture is to ensure that complementarities are sought, in contrast to having localities within the same region compete with each other on the same issues; complementarity is the smarter collective tactic. So, universalism of specific policies may be less intelligent than taking a place-specific and a function-specific approach. Tailoring development action to the particular demands of the of the city-region's unique capacities and assets need to be the primary foreign investment-attraction goal. (See Kitson, Martin, & Tyler, 2006, for details on the explanation of each of these problems, and the implications for their solutions.)

Thus, in spite of the ambiguities and lack of definitive operational guidance of the current state of regional competitive theory and practice, by drilling down into the working details, the policies planner may better understand these functions and their dynamics, and in the process be better positioned to formulate effective strategies of foreign business and investment.

The metroMichigan Region

This is the network of Michigan's urban core city-regions that is located in the southern quarter of the state. The metroMichigan network spans this east-to-west sector of the lower peninsula from lake to lake. In today's global knowledge economy, this regional network is well positioned to compete; it hosts three of the nation's most innovative and productive research universities: the University of Michigan in Ann Arbor, Wayne State University in Detroit, and Michigan State University in East Lansing. These great knowledge-generating institutions have formed an alliance, the

University Research Corridor (URC). The URC is empowering Michigan's communities and economy by attracting talent and investment, and by producing the knowledge-workers needed for today's global knowledge economy and network society (University Research Corridor, n.d.; Anderson Economic Group, 2007). Given the convenient access to these institutions, businesses investing in the metroMichigan region and any of its urban core city-regions are making investments in ideas. Ideas are the drivers of innovation, creativity and enhanced quality of life in today's new economy and society.

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Section 5

Brownfields: Making Programs Work for Michigan Communities

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Introduction

Because of the obsolescence found in the physical structure of many core cities and the contaminants often found in inner-city properties, "brownfield" has become a critical concept for those wanting to revitalize central cities. In the last 50 years, suburban sprawl and demographic changes contributed to the destabilization of core cities. New highways, low-cost mortgages, and a long list of well documented factors increased American mobility and pushed some residents and footloose businesses to move out of the nation's industrial cities, leaving behind vacant factories, warehouses, and lots, including tax-delinquent and contaminated parcels (Couch, Fraser, & Percy, 2003; Hernández, Estrada, & Garzón, 1999; Greenstrein & Sungu-Erylmaz, 2004). For thirty years, governments have been increasingly aggressive in attempts to reverse trends and stimulate local development using governmental powers and resources, and by providing incentives to investors, developers, and industries.

Many core cities realize that incentive activity is necessary to overcome perceptions that greenfields are less costly, less risky, and more profitable than inner-city development. Some communities have learned that they can induce developers to work in core cities if incentives create an acceptable risk/reward balance, essentially leveling the playing field with suburban areas. A wide variety of available strategies include grants, micro and low-interest loans, loan guarantees, second-position loans, secondary mortgage markets, loan insurance, tax deductions, tax abatements, tax credits, land assembly, land write-downs, land leases, and transfer of property rights (Lyons, Thomas, & Hamlin, 2001).

The Resource Conservation and Recovery Act (RCRA) of 1976 was the first attempt to regulate waste-disposal. Property owners were held liable for site contamination and were made responsible for cleanup. The federal Comprehensive Environmental Response Compensation Liability Act (CERCLA) of 1980 identified and remediated contaminated sites that posed a significant health threat. Cleanup requirements were set to residential standards for all properties and owners were responsible for cleanup. Also, lenders were often liable for properties for which they gave loans. These strict liability provisions strongly discouraged redevelopment, particularly in older, industrial communities.

Changes to CERCLA and RCRA through the Asset Conservation, Lender Liability and Deposit Insurance Protection Act of 1996 helped to stimulate lenders to invest in contaminated properties. Along with federal legislation, many states developed their own statutes to induce brownfield redevelopment. Although many states statutes follow CERCLA, some states, with Michigan a leading example, have formulated a different approach (Bartsch, 1998).

Michigan is nationally recognized for its innovative brownfield programs (Consumer Renaissance Redevelopment Corporation, 1998a; 1998b). Key to Michigan's reforms was the change in liability associated with contaminated properties. Michigan's 1995 Environmental Response Act amendments released new owners from liability for prior contamination if they perform a Baseline Environmental Assessment (BEA) and meet "due-care" requirements to protect the public. Cleanup standards became tied to future use. In 1996 the U.S. Environmental Protection Agency (EPA) officially agreed with the Michigan Department of Environmental Quality (DEQ) not to sue property owners based on the lack of responsibility for on-site contamination.

Direct intervention of the public sector in cleaning up brownfield sites has now been reduced to a few categories. Large numbers of brownfield sites are cleaned up by the private sector using several Michigan public incentives statutes. In 1996, Michigan adopted the first program that allowed local governments to offer financial incentives. The Brownfield Redevelopment Financing Act (Act 381 of 1996) allowed municipalities to capture state and local property taxes from a contaminated property through a tax increment financing process and use them to cover cleanup costs. Public Act 382 of 1996 allowed owners to take a credit against the single business tax for brownfield redevelopment costs. In 1998, Michigan issued bonds to support brownfield cleanup with grants and loans to eligible units of government. In 2000, Michigan expanded the financial benefits to functionally obsolete or blighted properties within qualified local government units.

Evaluating the redevelopment impact of the brownfield programs in Michigan became the interest of scholars only recently. Previous efforts concentrated on assessing specific programs, such as the implementation of tax abatements and their use over time (Sands et al., 2006) and whether the BEA Program (Hula & Davis, 2004; Hula, 2003a) and Site Assessment Fund (Mohamed & Dancik, 2006) have stimulated private investment. Previous efforts analyzed the citizens' support for the Michigan brownfield redevelopment policies (Hula, 2003b) and the shift of environmental programs toward economic development-driven forces (Hula, 2001).

While some have attempted to evaluate general incentive programs (Hamlin & Lyons, 2003; Hamlin & Lyons, 1996), few examined the preference of developers and property owners for brownfield redevelopment incentives (Meyer & Lyons, 2000; Alberini, Longo, Tonin, Trombetta, & Turvani, 2005; Wernstedt et al., 2006). Other research attempted to identify criteria for assessing the viability of local brownfield redevelopment programs (Bacot & O'Dell, 2006). None of this research was conducted in Michigan but it provides valuable methodological tools.

Although Michigan is acknowledged for innovative policies to promote brownfield redevelopment, not enough analysis has determined which aspects of the program work. The state has engaged in few systematic efforts to coordinate data from the various agencies and to collect information about community and developer response to brownfield incentives. In the past, nothing has been known about cross-use of other incentives, and the limited knowledge has not been effectively disseminated to local governments. Further, the intensity of budget and economic woes of the state make it imperative that we know the most efficient use of taxpayer dollars. We need to organize information in order to assess how core cities can better utilize current incentives and programs and to formulate alternative methods to promote redevelopment.

Key Definitions

Michigan Brownfield Redevelopment Program

As will be seen, the *Michigan Brownfield Redevelopment Program* can be defined in many ways. We define it initially as having three important governmental facets that promote public and private redevelopment of older cities. They are: (1) the enabling of brownfield redevelopment authorities as the responsible implementing and coordinating organization at the local level; (2) limits to liability through the baseline environmental assessment (BEA) process and the "due care" process; and (3) incentive programs, including the state-funded clean-up programs of the first bond issue: the grants and loans of the Clean Michigan Initiative funded by bonds; the Brownfield Redevelopment Financing Act tax increment financing program; and the SBT/MBT tax credits. (Michigan Department of Environmental Quality, 2008a; 2008d)

Part 201 Amendments of 1995 of the Natural Resources and Environmental Protection Act (NREPA)

In June of 1995, major amendments to Michigan's primary environmental cleanup law (Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended) were enacted. The principal, stated objectives of these amendments were to: "(1) put fairness in the liability scheme by only holding persons who caused the contamination responsible for the cleanup; (2) remove excess conservatism from the cleanup standards; and (3) assist in returning contaminated property to productive use" (Michigan Department of Environmental Quality, 2002). Addressing these goals, the amendments established the concept of *Baseline Environmental Assessment* (BEA) and *due care plans*. In the original 1994 act, an eligible property was defined as a *facility*, generally meaning that it had contamination levels above established standards.

Baseline Environmental Assessment (BEA)

A *Baseline Environmental Assessment* is a report filed by a new property owner. BEAs are used to gather enough information about the property being transferred so that existing contamination can be distinguished from any new releases that might occur after the new owner or operator takes over the property. Its purpose is to allow people to purchase or begin operating at a facility without being held liable for existing contamination.

Due Care Plan

Section 20107a of Part 201, Environmental Remediation, of (NREPA), specifically requires that owners and operators take due care measures to ensure that existing contamination on a property does not cause unacceptable risks and is not exacerbated. Such measures include evaluating the contamination and taking necessary response actions. Due care requirements are not related to the owner or operator's liability for the contaminants; they apply to non-liable parties and liable parties alike. The due-care requirements were designed so that contaminated properties could be safely redeveloped without complete cleanup. The list of measures that a property owner plans to take and the documentation of measures and results is often called the *due care plan*.

Facility

If a property is defined as a *facility*, the property has contamination levels above standards established in the act. (Michigan Department of Environmental Quality, 2006a). A Part 201-listed site is a location that has been evaluated and scored by DEQ using the Part 201 scoring model. The location is or includes a facility as defined by Part 201, where there has been a release of a hazardous substance in excess of the Part 201 residential criteria, and/or where corrective actions have not been completed under Part 201 to meet the applicable cleanup criteria for unrestricted residential use.

Brownfield Redevelopment Financing Act

The Brownfield Redevelopment Financing Act of 1996, PA 381 as amended, enabled localities to create *Brownfield Redevelopment Authorities* (BRAs) to facilitate the implementation of *brownfield plans* and promote revitalization of brownfield properties (Michigan Department of Environmental Quality, 2006a). The act also established a method to finance environmental response activities at contaminated properties. It allowed municipalities to develop and implement *brownfield redevelopment financing plans*. These plans are structured like tax increment financing. The local and school property tax revenues resulting from applying the tax rate to new development is *captured* by the local brownfield redevelopment authority and used for brownfield purposes (Michigan Department of Environmental Quality, 2008d). An approved *work plan* for a specific site is required to utilize these Brownfield Redevelopment Financing Act provisions.

The Brownfield Redevelopment Financing Act was amended in June of 2000. The amendments provided municipalities with additional tools for brownfield redevelopment by allowing capture of local and school property taxes for a wider variety of properties and activities. In qualified local governmental units, primarily core cities, eligible properties include those that are blighted or functionally obsolete, and eligible activities include infrastructure improvements, demolition, lead or asbestos abatement, and site preparation. (Michigan Department of Environmental Quality, 2008d)

The Brownfield Redevelopment Financing Act was amended again in December of 2002. The main provision was extension of the sunset through December 2007 for approval of work plans to capture school taxes to conduct eligible activities under a brownfield plan (Michigan Department of Environmental Quality, 2008d). Additional amendments in the final days of 2007 include Acts 201, 202, 203, and 204 of 2007. This section of the law will be revised in February 2008 to reflect these changes. (Michigan Department of Environmental Quality, 2008d)

Brownfield Redevelopment Authorities (BRA) and Brownfield Plans

A municipality may establish one or more *Brownfield Redevelopment Authorities* (BRAs) to implement *brownfield plans*. A county may operate an authority on behalf of a municipality located within the county only if the municipality concurs with the provisions of the brownfield plan for the eligible property located within the municipality. An authority develops a *brownfield plan* that identifies which properties the BRA will conduct eligible activities on and from which it will capture taxes (Michigan Department of Environmental Quality, 2008d).

Financing Plans and Tax Capture Provisions

All additional property tax revenues that come from applying the property tax rate to the increased value of an eligible property may be *captured* by the BRA. This includes revenues from taxes levied for school operating purposes. The increased value is the value of all property in the finance plan area over and above the same property's value in an established base year (the year the property was added to the brownfield plan). *Capture* means that those additional tax revenues are not distributed in the normal way to each of the taxing jurisdictions, but rather go to the BRA for use on eligible activities. For the purposes of this act, school taxes are considered to be the revenues resulting from applying the local school's operating millage and the state education tax rate to the property value increment. Taxes already captured as part of an existing tax increment financing plan under other state enabling laws and taxes levied to pay off specific obligations are exempt from capture by the BRA. School taxes may NOT be used for response activities that benefit a party who is liable under Part 201. (Michigan Department of Environmental Quality, 2008d)

A BRA may issue revenue and tax increment financing bonds and notes in order to finance the eligible activities and then capture taxes from the eligible property to pay off the obligations. An authority may establish a local site remediation revolving fund and place excess captured taxes from properties at which eligible activities are conducted into the local fund. The authority can use the local revolving fund to conduct eligible activities at other eligible properties. (Excess school taxes for eligible activities approved by the Michigan Economic Growth Authority cannot be captured for the local site remediation revolving fund. However, the revolving fund may be used to fund Michigan Economic Growth Authority-eligible activities on eligible properties.) Captured taxes can be used to cover the costs of one or more eligible activities that are conducted at the *eligible property* from which the captured taxes are generated. (Michigan Department of Environmental Quality, 2008d)

Eligible property. An *eligible property* is property that was used or is currently used for commercial, industrial, or residential purposes, and is either in a qualified local governmental unit and is a *facility* as defined in Part 201 of the NREPA (is contaminated), is functionally obsolete or blighted, or is not in a qualified local governmental unit and is a contaminated *facility*. Parcels that are contiguous and adjacent to that property are also considered eligible property if development of these adjacent parcels will increase the captured taxable value of the primary property. (Michigan Department of Environmental Quality, 2008d)

Eligible activities and costs. For a contaminated property (facility) requiring DEQ approval, the following are *eligible activities*:

1) Response activities to complete a BEA
2) Response activities needed for an owner or operator to comply with the due care requirements of Part 201 of the NREPA
3) Additional response activities that are above and beyond BEA or due care activities for a facility

In qualified local governmental units (primarily core cities) requiring Michigan Economic Growth Authority (MEGA) approval, qualified activities also include:

1) Public infrastructure improvements
2) Demolition that is not a response activity
3) Lead or asbestos abatement
4) Site preparation that is not a response activity
5) Relocation of public buildings and operations for economic development purposes

Captured taxes can only be used for the cost of the eligible activities listed above and for the following other costs: (1) the cost of principal and interest of any obligations issued by the authority to finance the eligible activities, and (2) the cost of preparing and approving work plans for the eligible activities. An authority may capture up to $75,000 per year in local taxes for reasonable and actual administrative and operating expenses of the authority. This amount is typically shared by all on-going projects.

Revolving funds. A brownfield redevelopment authority can capture local and school property taxes from an eligible property in excess of the amount needed to pay for the eligible activities approved by DEQ. The excess captured taxes must be placed into a local site remediation *revolving fund* to be used only for eligible activities at other eligible properties within the brownfield plan area. This excess capture can continue for up to five years after the primary project costs are covered. Excess school taxes cannot be captured on activities approved by MEGA, however the revolving fund may be used to fund MEGA-eligible activities on eligible properties. (Michigan Department of Environmental Quality, 2008d)

Work plans. Approval of a *work plan* by the Michigan Department of Environmental Quality and/or the Michigan Economic Growth Authority is necessary in many cases. This approval is required if school taxes (local school operating taxes and the state education tax) are to be captured to conduct eligible activities.

Eligible activities requiring DEQ approval, as described above, include 1) baseline environmental assessments, 2) due care activities, and 3) additional response activities under the NREPA.

The Michigan Economic Growth Authority's review and approval are needed where school taxes will be captured for eligible non-environmental activities on contaminated, blighted, or functionally obsolete properties (Michigan Department of Environmental Quality, 2006a). MEGA must approve a work plan for a project whether or not school taxes will be captured along with local taxes if (1) a brownfield plan includes properties that are adjacent or contiguous to an eligible property and (2) taxes will be captured for public infrastructure improvements that directly benefit the eligible property, or (3) for demolition, (4) lead or asbestos abatement, or (5) site preparation that are not response activities under Part 201 of NREPA. The percentage of local taxes captured must be equal to or greater than the percentage of school taxes captured, taking into account all tax capture plans in place, either under the Brownfield Redevelopment Financing Act or other state laws.

The authority determines which of the eligible activities will be conducted at an eligible property. An authority cannot capture school taxes to conduct the eligible activities unless the activities are consistent with a work plan approved by the DEQ or MEGA prior to the work being conducted. (Michigan Department of Environmental Quality, 2008d)

The work plan is submitted to the DEQ and/or MEDC by the authority, not by the property owner, developer, or a consultant. The work plan includes a copy of the brownfield plan. For eligible properties that have both DEQ and MEGA activities, one work plan is submitted to both agencies. Work plan reviews can take more than 60 days. The statute requires a written response from the state agency regarding work plan acceptability. (Michigan Department of Environmental Quality, 2008d)

Michigan Economic Growth Authority (MEGA)

Begun in April of 1995, the *Michigan Economic Growth Authority* is a program established by the Michigan state government with the stated mission of spurring in-state job creation and business investment. The authority selects firms to receive Michigan Business Tax (formerly Single Business Tax) credits in return for creating new or expanded facilities and jobs in Michigan. MEGA deals also result in local incentives for the recipient firms and often other state incentives such as other brownfield incentives as well. Through 2004, more than $1.8 billion in Single Business Tax relief had been offered to more than 200 firms in 230 MEGA agreements. The value of these MEGA agreements rises to more than $3 billion with the inclusion of other state and local incentives, such as property tax abatements, job training subsidies, and infrastructure improvements. Nearly one-third of this total ($987 million) has been provided by local units of government or by local economic development agencies.

Clean Michigan Initiative

The *Clean Michigan Initiative* (CMI) is a 675 million dollar bond approved by Michigan voters on November 3, 1998 to improve and protect Michigan's water resources. It is sometimes called the *second bond issue for brownfields*. The major programs are administered by the Michigan Department of Environmental Quality, the Michigan Department of Natural Resources, and the Michigan Department of Community Health.

A major part of the CMI is the brownfield grants and loans program. *Brownfield Redevelopment and Site Reclamation Grants* provide funding to local units of government and other public bodies to investigate and remediate known sites of environmental contamination, which will be used for identified economic redevelopment projects. A proposed project must result in economic benefit for the community through job creation, private investment, and/or a property tax increase. The property must meet the definition of a *facility* under Part 201 of NREPA. Grant recipients are required to sign a grant agreement prior to commencement of grant eligible work. (Michigan Department of Environmental Quality, 2006b)

Any county, city, village, township, Brownfield Redevelopment Authority, or other authority or public body created pursuant to state law may apply for a grant. Eligible activities include environmental investigations and assessments, interim response, and due care response activities necessary for the proposed development. Only one project may be awarded to an applicant during any fiscal year.

A liable party may not profit from the expenditure of state funds nor be relieved of responsibility for environmental response activities (Michigan Department of Environmental Quality, 2006b). These grant funds from the CMI are now nearly exhausted. More communities are now turning to the loan program.

CMI *Brownfield Redevelopment Loans* (CMIBRL) and *Revitalization Revolving Loans* (RRL) are designed to support the redevelopment of brownfield properties by providing low-interest loans to local units of government and other public bodies to investigate and remediate sites of known or suspected environmental contamination (Michigan Department of

Environmental Quality, 2006b).

A proposed project must have economic development potential. A municipality must pledge its full faith and credit to secure the loan. When the Brownfield Redevelopment Authority is the applicant, the municipality under which the BRA was formed must make this pledge. The Michigan Department of Treasury approves the applicant's ability to incur the debt. Loans are offered at an interest rate of no more than 50 percent of prime. Currently the interest rate is set at 2%, simple interest. There are no payments or interest due for the first five years after a loan is awarded. Annual payments begin in the fifth year of the loan. The full amount must be repaid within 15 years of the loan award. (Michigan Department of Environmental Quality, 2006b)

According to DEQ, this loan program provides an excellent opportunity for a community or the BRA to use tax incremental financing under the current provisions of the Brownfield Redevelopment Financing Act and then to capture future taxes generated from the redevelopment of the property to repay the loan. Through this approach, a community might be able to capture tax dollars beyond that necessary to repay their loan. The surplus capture may then be use for future brownfield redevelopment activities in the community as described above. (Michigan Department of Environmental Quality, 2006b)

Methods

The methodology for this study has had four components: (1) analysis of the other studies and assessments of the Michigan Brownfield Program; (2) accumulation and coordination of existing Michigan raw data; (3) a state-wide, random-sample survey of 1000 Michigan residents concerning their attitudes about brownfield redevelopment conducted for the project team by the Michigan State University Survey Research Center; and (4) in-depth interviews with BRA staff and other government functionaries concerning the behavior of the most active communities, conducted by project investigators. Project conclusions and recommendations result from interrelating these four efforts.

Measures

BEA Members

The DEQ was able to provide a summary of brownfield environmental assessments (BEAs), whether or not they requested a DEQ review of the assessment, whether or not the assessment was affirmed, and whether it was for Part 201 or Part 213 of the legislation.

State-Funded Sites

DEQ's Division of Remediation and Redevelopment provided the project with a list of state-funded cleanup sites from 1989 to 2007 (those funded by the first bond issue). Most of these sites were government owned. Ron Smedley, coordinator of Redevelopment, attempted in 2004 to coordinate BEAs with state-funded sites by address. The DEQ website provides a list with pictures of recent sites.

Part 201

The DEQ web page provides a list of Part 201 sites online (Michigan Department of Environmental Quality, 2008c). A Part 201 listed site is a location that has been evaluated and scored by the DEQ using the Part 201 scoring model. The location is or includes a facility as defined by Part 201, where there has been a release of a hazardous substance(s) in excess of the Part 201 residential criteria, and/or where corrective actions have NOT been completed to meet the applicable cleanup criteria for unrestricted residential use. The Part 201 list does not include all of the sites of contamination that are subject to regulation under Part 201 because owners are not required to inform the DEQ about the sites and can pursue cleanup independently. Sites of environmental contamination that are not known to DEQ are not on the list, nor are sites with releases that resulted in low environmental impact (Michigan Department of Environmental Quality, 2008c).

Part 213

The DEQ website provides a list of Part 213 (leaking underground storage tanks, or LUST) sites. The tank information is based on forms provided to the Michigan Department of Environmental Quality by owners. The information may not be reflective of actual site and tank data due to various reasons, such as owner's failure to report changes, owner error in reporting ownership changes, and data entry errors. The data make a distinction between *open LUST* and *closed LUST*. An *open LUST* site is a location where a release has occurred from an underground storage tank system, and where corrective actions have not been completed to meet the appropriate land use criteria. An open LUST site may have more than one confirmed release. A *closed LUST* site is a location where a release has occurred from an underground storage tank system, and where corrective actions have been completed to meet the appropriate land-use criteria. The DEQ may or may not have reviewed and concurred with the conclusion that the corrective actions described in a closure report meets criteria. (Michigan Department of Environmental Quality, 2008b)

SBT/MBT Credits Approved by MEGA

The Michigan Economic Development Corporation (MEDC) provided information about MEGA-approved Single Business Tax credits, including the amount of eligible investment, the amount of approved credit, and the approval date. Project lists and summaries divided the projects into those with credits of less than $1,000,000 and those with credits of more than $1,000,000.

DEQ-Approved TIFs

The Michigan Department of Environmental Quality makes its annual *Brownfield Redevelopment Finance Report* available online. This report is a summary of the information contained in brownfield plans and work plans submitted to the DEQ for each calendar year.

Clean Michigan Initiative Sites

Each year the DEQ generates a report entitled the *Consolidated Report on the: Environmental Protection Bond Fund, Cleanup and Redevelopment Fund, Clean Michigan Initiative Bond Fund*. The appendices of this report contain site-specific information on the following: (1) State Sites Cleanup Programs, (2) Environmental Cleanup and Redevelopment Programs, (3) Environmental Cleanup and Redevelopment Emergency and Contingency Programs, (4) the Revitalization Revolving Loan Program, (5) the Municipal Landfill Cost-Share Grant Program, (6) the Site Reclamation Grant Program, (7) the Site Assessment Grant Program, (8) the Brownfield Redevelopment Grant Program, (9) the Brownfield Redevelopment Loan Program, (10) the Solid Waste Alternatives Program, (11) the Brownfield Redevelopment Financing Act Program, and (13) the Waterfront Redevelopment Grants Program. This project was most focused on the CMI brownfield redevelopment grant and loans program.

Superfund Sites

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA, 42 U.S.C.s/s 9601 et seq) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. The list of sites in Michigan is available to the project.

U.S. EPA Grants and Loans

The United States Environmental Protection Agency makes a brief description of all EPA brownfield grants and loans available online (United States Environmental Protection Agency, 2008). Michigan is a leading recipient of these funds in terms of the number of projects.

Local-Only TIF

Local-only tax increment financing (TIF) authorities are required to file a report with the Michigan Department of Treasury, and bond issues associated with those require the same approval as other municipal revenue bonds, but the data about these has not been organized into a usable structure. It might be impossible to sort out those local TIFs that were used to redevelop brownfield projects.

State-Wide Surveys

This research team conducted a state-wide, random-sample survey of Michigan residents to determine their attitudes about the Michigan brownfield program. A target of 1000 respondents was achieved. Questions focused on who should be responsible for cleaning up brownfields in various common situations. Should the polluters always be required to pay clean-up costs, even if what they did was legal at the time? Should the current owners be required to clean the property even if they did not do the polluting? Should governments be willing to cover some of the clean-up costs if that would promote redevelopment and job creation? The research team asked similar or identical questions in 1996 to a similar random sample. Measuring the change in public attitude is important to understanding the success of the current policies. Furthermore, data can be organized by jurisdiction to interface with other agency data.

Interviews

This research team carried out fourteen in-depth discussion/interviews with the most active BRAs and with the key state agencies and state-wide interest groups. A wide-variety of issues were discussed, focusing on how to improve the program in the short and long term. Background information at BRAs included details of plans, projects, and procedures. Whether other public-private partnership incentive programs are being used by Michigan communities in combination with the brownfield program was a priority question. The discussions averaged 90 minutes and went into depth on the array of public incentives communities are using in their brownfield projects.

DEQ Survey of BRA Directors

The Michigan Department of Environmental Quality recently carried out an internet survey of Brownfield Redevelopment Directors. Data collection was completed on January 18, 2008, but the data has not yet been compiled. The survey asked BRA Directors many questions related to their level and type of activity, such as frequency of their board meetings, status of their brownfield plan and individual projects in the plan, and level of tax increment financing activity (local only). It also asked how many projects are an environmental response vs. non-environmental and what type of properties they are. It also attempted to get at how much the program leverages other investments. We will be analyzing the results when the raw data is available in March, 2008.

Results

Prior Studies

Part 201 Working Group

The Michigan Department of Environmental Quality (DEQ) asked Public Sector Consultants to facilitate a stakeholder-driven discussion of ways that Part 201, with all of its amendments and additions, could be improved. This review process employed four subgroups composed of members with a diverse range of direct experience with the Part 201 program. The report, entitled *Environmental Remediation Program Review: Final Report and Recommendations*, represents the collective effort of those members including the regulated community, lenders, consultants, lawyers, and DEQ staff (Public Sector Consultants, 2007). The working group completed its task in 2007.

The brownfields subgroup of the Part 201 Working Group was of most interest to this study, although all subgroup reports are relevant. Recommendations of the brownfield subgroup were as follows:

With respect to the Brownfield Redevelopment Financing Act and brownfield tax credits:

1) Eliminate the sunset provision on the approval of work plans for school tax capture in the Brownfield Redevelopment Financing Act
2) Make brownfield sites more attractive for redevelopment by expanding or allowing additional activities to be eligible for brownfield funding, and by streamlining the process
3) Authorize brownfield tax credits with any Single Business Tax (since continued under the new Michigan Business Tax) replacement structure

Related to brownfield program coordination:

1) Establish a state Office of Brownfield Redevelopment to coordinate and streamline all agency programs to support and facilitate the completion of Michigan's brownfield redevelopment projects
2) Create a unified brownfield redevelopment preliminary application that could be used by all state agencies and local units of government for brownfield-related program incentives, grants, and loans

With respect to brownfield work plans:

1) Streamline DEQ approval of Brownfield Redevelopment Financing Act work plans
2) Reduce the time allowed to review work plans

Relative to funding issues:

1) Allow the approval of a financing plan for school tax capture to provide two mills of the captured State Education Tax (SET) to be used to support the administration of the state's brownfield programs and DEQ's brownfield grants and loans
2) Diversing a percentage of local tax capture to be placed in a local revolving fund, prior to completion of eligible brownfield-project activities, provided that the diversion creates no net fiscal impact to school tax capture

Assessing the Investment Impact of Michigan's Site Assessment Fund

Among the many brownfield redevelopment tools utilized by the State of Michigan is a Site Assessment Fund (SAF) administered by the Michigan Department of Environmental Quality. The site assessment fund provides funding to eligible local governments to help brownfield sites to be redevelopment-ready.

A research project, primarily out of Wayne State University, investigated the investment effects of the use of the site assessment fund. The research team completed a report entitled, *Priming the Pump: Assessing the Investment Impact of Michigan's Site Assessment Fund* (Mohamed & Dancik, 2007). Because brownfield redevelopment is an element of urban redevelopment and land use strategies, the research was important as a preliminary assessment of whether the fund contributes to urban growth and land use stewardship.

The research focused on a sample of 30 projects involving 40 sites, located in the southern half of the lower peninsula of Michigan. The findings were that:

1) Twenty-two of the 40 sites are in productive use. Fourteen resulted in new development, five were adaptively reused and three are municipal parking lots. At the conclusion of the study, eighteen were idle or vacant, but there was evidence that local governments were making efforts to redevelop those 18 sites.
2) The fund has been successful in transferring publicly owned property to the private sector. While three quarters of the sites were owned by the public sector at the time the SAF grants were awarded, as of September 2006, twenty-six sites (about two thirds) are now in private control.
3) For the sites that were redeveloped, gross property tax revenues collected from the time of the grant to the time of the study were estimated at about $6.5 million. This figure was just over seven times the cumulative grants for the 30 projects, $907,593.
4) The research team identified a total of 124 new jobs as a result of redevelopment activity. This corresponds to grant expenditures of about $7,300 for each job created (Mohamed & Dancik, 2007).

Twenty-seven of the 30 grants were awarded to economically depressed cities. The results of the study suggested that the number of successes and the results of such successes make it a program worth continuing. Furthermore, "this approach can contribute to urban redevelopment and land use stewardship in economically depressed cities" (Mohamed & Dancik, 2007).

Current Study

One objective of the project was to assemble data on brownfield projects throughout the state. This proved to be a very difficult task. Because the brownfield program is multifaceted and involves a multitude of federal, state, and local agencies, data are sometimes difficult to acquire and nearly always difficult to interface. In some cases, one agency does not know what information other agencies have. All relevant agencies were very cooperative with the research team.

Information that we have been able to pull together and apply to the study includes the following: BEA information, a list of "state-funded sites" funded by the first bond issue, a list of projects that have received Single Business Tax (SBT) credits for recent years, a list of state-approved (school capture) TIFs for recent years, a list of CMI grant projects, and a list of CMI loan projects, to name a few of the more important ones. EPA project information is also available. Many of these lists include more detailed information on location, cost, date, sources of financing, etc., but are often set up in ways that do not mesh with other data. Little information has been organized at the state level on local-only brownfield efforts even when projects are promoted by the local BRA. Such projects might include those financed by local Downtown Development Authority (DDA) tax increment financing plans (TIFs), local revolving loan funds, Economic Development Corporation (EDC) bonds, etc. Even though the information is not easily coordinated, we were able to use the data to evaluate how active communities have been.

DEQ-Approved TIFs

From the time the program began in 1996 until the end of 2005, the DEQ has approved $82,886,142 for eligible activities at eligible properties. When all DEQ-approved projects through 2005 are complete, estimates are that they will have generated more than $1.9 billion dollars in private investment and created more than 9,456 jobs. (Michigan Department of Environmental Quality, 2006b)

Table 1 provides an estimate of state and local school tax capture for all projects from 1997 through the end of 2005. The estimates were taken from brownfield plans approved by local BRAs. The estimates are based upon the projected cost of the proposed eligible activities, assuming all activities in the work plan would be approved by the DEQ and completed according to schedule, and the property value would increase as projected.

Table 1

State and Local School Tax Capture for Brownfield Projects

Year	State Education Tax	Local School Operating Tax
1997	$12,147	$19,381
1998	$16,434	$32,474
1999	$75,385	$148,581
2000	$249,621	$598,750
2001	$500,910	$1,288,028
2002	$721,255	$1,920,411
2003	$1,031,799	$2,860,054
2004	$1,702,736	$4,434,305
2005	$2,076,734	$5,240,155
Total	**$6,387,021**	**$16,542,139**

Source: Michigan Department of Environmental Quality. (2006). *Brownfield Redevelopment Finance Act Report, Calendar Year 2005*. Retrieved February 13, 2008, from http://www.deq.state.mi.us/documents/deq-essd-grantsloans-catalog.pdf

Interview Results

For the sake of the policy analysis discussion of this report, the most important questions we asked active brownfield programs in Michigan had to do with the brownfield professionals' evaluation of the program and their suggestions for the future.

Good and important. Is the Michigan program, however defined, a good program that is important for the future of the state of Michigan? In brief, opinions of professionals were strongly positive. Nearly every interested party sees the

Michigan brownfield effort as “essential” to the state’s future. They perceive the Michigan program as having an impact worthy of the resources invested. Based on their contacts with peer-professionals in other states, several brownfield redevelopment authority staff members in various communities suggested that Michigan is a leading state in its approach to brownfields. This provides up-to-date confirmation of a assessment offered by a nationwide study of state brownfield redevelopment programs conducted by the Consumers Renaissance Development Corporation, They ranked Michigan first in the nation for making brownfield redevelopment successful. The study measured such redevelopment tools as liability protection, cleanup standards, financial incentives, and governmental support both at the state and local levels. (Consumer Renaissance Development Corporation, 1998a; 1998b; DEQ 2002)

Opinions about the quality of the day-to-day management of the Michigan brownfield program were somewhat more mixed. Nearly every person who talked with the research team had both positive and negative comments. But, since people define “the program” in a variety of ways, feelings about who or what organization “manages” the program were not consistent.

Putting a ceiling on liability. Why do people associated with urban redevelopment have positive opinions about Michigan’s approach to brownfield redevelopment? Key to this perceived success is not that Michigan spends more money or gives more grants. Rather, Michigan’s attack on both the risk and the reward side of the developer/investor risk/reward equation is considered to be the critical element. As stated by one BRA director, the “lynch pin” in the program is limiting liability through the baseline environmental assessment (BEA) process. If a new owner of a property completes a baseline environmental assessment clearly identifying existing contaminants on the property, then that new owner is only liable for any new contamination beyond what was identified in the BEA. Another BRA director told our research staff that he sees the “...liability protection afforded by the BEA process as crucial. Some other states do it in other, less institutionalized ways. Wisconsin utilizes the ‘all appropriate inquiry,’ process promoted by the U.S. EPA, for example. But, Michigan leads in this area.”

Bridging the liability issue to the issue of the cost of redevelopment is the concept of *relative risk*, meaning that the risk of environmental health problems should be balanced with other (e.g., economic) risks. This leads to the policy of “use-determined standards.” Important to the reduction of redevelopment costs, according to BRA directors, is the law allowing cleanup to standards befitting future use rather than demanding residential standards for all sites. The idea is that cleaning up a site to residential standards does not make sense if the property is going to go back into industrial use. However, if hazardous materials remain on the site after redevelopment, they must be contained, and the owner must file a due care plan for monitoring and maintaining the containment.

Incentives. The other side of the Michigan program is the incentive package, which communities appreciate, but with some reservations. Most communities that have used the legislative authority appreciate the SBT/MBT tax credit, the Brownfield Redevelopment Financing Act tax increment financing program, and the Clean Michigan Initiative grants. Yet, many community leaders and professional staff would not define the “Michigan Brownfield Program” as being these incentive programs. They see these incentives as just another set of tools in the economic developers toolbox to be used when appropriate.

In reality, they often do not see these tools as the most suitable for many projects. Surprisingly, when looking at all brownfield projects, these DEQ- and MEDC-based programs are often a minor part of the total redevelopment effort. Many communities commented that, in many cases, they would rather use local programs such as a local DDA TIF than to try to obtain Michigan Economic Growth Authority state-level approval. This is not necessarily a criticism, but rather recognition that each project requires a different incentive package to respond to the project’s unique set of issues and constraints and the developer’s modus operandi.

Time and difficulty of using some aspects of the program. Three of the state’s most active communities expressed in interviews their concern for the time that approvals take. As is often heard concerning business incentive programs, “government works on a different time table than business.” “For developers, turn-around time is crucial.” The brownfield redevelopment process is complicated and interwoven with a great deal of up-front costs and liabilities. Delays are costly. Some said: “The program is too slow. It is out of step with the way private developers work.” “The process takes at least 60 days locally. Then the application goes to the state.” “Work plan approvals are slow.” This was a concern also expressed by the Part 201 Working Group.

Two communities stated that the approval process is inconsistent and that "the central DEQ office in Lansing looks at things differently" and "has a different agenda" than the regional offices.

Some suggested that the "CMI loan program is too bureaucratic for small businesses." "Going after the loan is not worth it for small loan amounts." "Brownfield loans are more work than they're worth." For most communities, the CMI loan is new, since they were able to receive grants. Now that grant funds are low, they are being required to apply for loans for the first time. Other communities do not have trouble working with DEQ, but found that the CMI loan program created some issues locally. Several communities that had experience with the CMI loan program indicated that local officials feel that the full-faith-and-credit requirement of the loan puts the municipality at too much risk. As a result, locals must negotiate a guarantee with the developer. This adds another layer of complexity.

One of the smaller communities indicated that they would rather use their local TIF for most projects, because the MEGA (MEDC)/DEQ approval process of the state TIF that allows for the capture of state school taxes is not worth the additional work for them.

Liability concerns. One set of concerns about the Michigan brownfield program has to do with who is liable for clean-up responsibilities. Over 70% of the communities we met with expressed concern about aspects of this issue. One concern was that if someone is identified as the liable party, even if they did not cause the pollution, DEQ will not allow the project to use state-approved incentives such as the MEGA/DEQ-approved TIF or the CMI grants or loans. Many times, the owner bought the land before BRAs existed, and was not the actual polluter.

In some cases, the liable party is the municipality that has the brownfield redevelopment authority, The local government might have acquired the property decades ago, perhaps as tax-delinquent property. In a least one case, the township that preceded the existence of the municipal corporation acquired the property. The city inherited the property at the time of incorporation. "No one would have known about the pollutants if the city's BRA had not tried to promote its redevelopment," claimed the mayor. Now, the city feels that because they pursued brownfield redevelopment, the city might face a several million dollar clean-up bill.

In another community, according to local officials, a BRA was ready to receive a DEQ CMI loan, but the environmental consultant that the local government hired to submit a BEA for the site missed the deadline by six days. Now the local BRA is considered liable for several million dollars of clean-up and the CMI loan was dropped from consideration because of the clause disqualifying liable parties from program participation, according to local officials.

One community discovered, in the process of pursuing brownfield redevelopment, that several of its parks are brownfield sites, for which they are now liable. If municipalities and BRAs are being caught in these kind of catch-22s, one can imagine that the process would certainly scare private investors.

In some cases, amateur developers realize too late that they are supposed to file a BEA. As a result, they become the legally liable party. When they come into the local BRA office to discuss redevelopment, they discover that they are not qualified for DEQ/MEDC programs.

Site selection concerns. Community interviews seem to indicate that the sites being redeveloped are not the most contaminated. Rather, they are the ones most in demand by developers because of their development potential. This includes those near waterfronts, on the fringe of viable downtowns, adjacent to major universities, and other high-value locations. In terms of the number of projects, industrial redevelopment ranks low. The risk/reward gap can only be closed by the current brownfield program in situations where developers perceive future rewards to be large. Fringe industrial sites seldom offer that calculus.

Politics. One smaller city BRA director's perception is that the program is too political at the state level. In his opinion, it is primarily designed for big cities and big projects. "The program is focused on the bigger, higher tech projects that can make a big media splash for the state's political administration," he said.

Local politics are also a concern. Over 80% of the communities we spoke with spontaneously described local political issues associated with brownfield projects. At least 70% indicated that local political attitudes seem to be turning against aspects of the brownfield program. In one community, a former mayor claimed that he lost re-election because his opponent criticized a brownfield project. At the opposite end of the state, all county commissioners up for reelection were opposed in 2007 by a coalition of candidates who were angry about a brownfield project. In a small industrial city with many brownfield sites, a city manager lost his job, in part, because the city council felt that the brownfield program was too aggressive. Two EDC/BRA directors we spoke with in the fall of 2007 had left their jobs by February, 2008 because of related frustrations.

Local issues include opposition to the use or threat of eminent domain, opposition to the use of “taxpayer money to enrich developers,” and “opposition to outsider developers” using local incentives. One BRA director indicated that some council members feel that they do not have sufficient control over BRA resources. In at least one case, a county BRA and the BRA of one of its cities had serious disagreements.

In at least one region, the major newspaper is continuously attacking brownfield projects. Another community has an active community electronic mailing list and blog site that tries to keep the opposition organized.

Suggestions. A main issue raised by nearly all communities that have used the Brownfield Redevelopment Financing Act tax increment financing is the need to have greater flexibility in the use of the increment capture, although each brownfield redevelopment professional had slightly different suggestions in that regard. One concern is the small amount allowed for administrative costs, generally $75,000 per year per community. Another community’s BRA staff suggested that they needed a more flexible way to spread the $75,000 fairly among their various projects, so that it does not create serious accounting difficulties. A third community suggested that a small part of the TIF capture should be set aside to pay for future monitoring of due care plans. This use of funds may be legal under current law, but communities have little incentive to become involved in such monitoring.

A fourth community leader suggested that an allowable use of TIF funds be to buy other properties to support the neighborhood of the project even if those properties are not directly used by or adjacent to the project. Successful communities seem to have a very entrepreneurial attitude in which the public redevelopment agency sees itself in the role of a developer. Such communities know the synergistic web of externalities that real estate development naturally creates. They know that successfully completing one project at a time does not make a difference in the overall competitiveness of the community. They see the need to reach a tipping point in a particular block, street, or neighborhood (i.e., a situation in which private developers see momentum in a neighborhood and perceive the opportunity for future rewards). To achieve this kind of intensity in a particular area, a community needs the ability to purchase and control some land parcels so as to be in a position to initiate the redevelopment process. Most community general funds do not have flexibility for this activity. Allowing flexibility in the use of TIF capture to acquire adjacent parcels could magnify project benefits. In the words of one economic development director, “your redevelopment program cannot succeed if all you get are the dregs.” He was referring to the fact that the only parcels that the city gains ownership of are tax delinquent properties abandoned by their owner. The city must also be able to buy strategic parcels.

Discussion

Small, Easy Changes in the Program

Limiting developer liability through baseline environmental assessments is seen as key to getting the risk/reward ratio into balance, and the concept of due care plans is seen as a way of ensuring that environmental goals are met as a counter-balance to this liability limit. But many, including BRA directors and state officials, have concern about the enforcement of due care plans. With so many jurisdictions involved in a single project, and with complex and changing ownership of such projects, some fear that monitoring and enforcement of due care plans might occasionally be lax. To prevent this, some mechanism to both staff and finance governmental oversight are suggested. One approach is to have the flexibility and the mandate for the developer and/or the community to put some money in escrow to cover the cost of future follow-up inspections and reports. These funds might come from, and be a legitimate cost of, Brownfield TIF recapture. They might also be a legitimate cost included in a Clean Michigan Initiative loan.

Training for Local Officials

Clearly, active communities have redevelopment champions, entrepreneurial leaders who seek out and ride herd on complex projects, sometimes for years, to bring them to fruition. This research suggests that this may be the most important factor separating more active communities from less active ones. Whether such champions can be trained is questionable. But, clearly, training agents should be doing more than instructing local leaders on the rules and procedures of financing programs. Training should include such things as internships, mentoring, study of best practice cases, and community short-term job swapping.

Property Acquisition

Successful community-wide redevelopment often requires reaching a tipping point in a particular block, street, or neighborhood, where developers see momentum and perceive the opportunity for future rewards. To achieve this kind of intensity in a particular area, a community needs the ability to purchase and control some land parcels. Most community general funds do not have flexibility for this activity. Allowing flexibility in the use of Brownfield Redevelopment Financing Act tax increment capture to acquire nearby parcels could magnify project benefits.

Program Evaluation

The Michigan brownfield program needs more evaluative research to know what is working and what is not. Currently, program data is scattered between several agencies, and neither state nor local staff have the time to evaluate projects or programs. Standardizing evaluation templates with mandatory follow-ups might be a solution, with funding for evaluation to come from flexibility in the use of TIF capture or a small part of the grants and loans themselves.

Big Policy Shifts: Moving Away from the Use of Public Taxpayer Money

Risks and Rewards of Brownfield Redevelopment

Brownfield redevelopment needs to continue, both from the perspective of the public health benefits of cleaning up contaminants and from the need to redevelop aging core cities. Yet, for both political and economic reasons, public funding is becoming less available. While arguing for continued public funding may be important, bold new directions that promote brownfield redevelopment by the private sector must also be explored. This essentially means creating situations where more private capital is induced to flow to projects and programs redeveloping brownfield sites.

"Critical to the [private capital] intermediary process is matching the risks that savers and investors are willing to take with the potential rewards associated with an investment" (Hamlin & Lyons, 2003). Brownfield redevelopment projects carry additional risks. These risks results from: (1) the liability associated with contaminated property; (2) the additional costs involved in redevelopment, such as cleanup, demolition, updating infrastructure, and site preparation; (3) additional construction and development costs resulting from unusually sized and shaped lots and the need for parking structures; and (4) market risks that often derive from promoting developments in declining areas, to name a few. The rewards may be great in some situations, such as obtaining uniquely attractive waterfront sites or central locations linked to transportation hubs, or property adjacent to universities. The key is therefore maximizing those rewards for private developers while reducing their risks. At the same time, we must minimize public outlays and maintain public equity, openness and oversight.

To accomplish all of this, governments must utilize their powers in innovative ways. Some of these are non-financial approaches, while others utilize financial powers that do not involve the state budget. One non-financial example of risk reduction would be the limiting of liability through a fully implemented BEA/due care process as described earlier. Another would be government's ability to own, assemble and prepare land, also discussed earlier. A third would be government's control over public infrastructure. On the financial side is the use of a government's authority to lubricate the financial intermediary system by facilitating the creation of appropriate institutions and sharing some of the risk, discussed next.

Mezzanine Finance

For reasons that are not totally understood, the middle range of the risk/reward spectrum is often not well served. On the one hand, most savers are risk averse, preferring to put their wealth into very conservative organizations, such as banks. In order to protect those deposits, banks act out their conservative role. Because of the risks and costs involved, traditional bank financing would seldom satisfy all of the financing needs of a brownfield project (Hamlin & Lyons, 2003; Hamlin 1998).

In sophisticated and aggressive investment environments, venture capitalist spring up to provide another kind of financial intermediary. Venture capitalists focus on the very high-risk, generally technology-intensive sector that holds out the promise of several hundred percent return on investment. While high-tech firms may occasionally locate in redeveloped brownfield projects, this kind of financing is more about the creation of technology and is seldom relevant to the physical redevelopment of a site (Lyons, 2002; Hamlin, 1998).

The large middle of the risk/reward spectrum includes everything between conventional bank financing and venture capital. Nearly all brownfield projects fall into this broad middle range. Private institutions are poorly developed to deal with the medium-risk client. Government does a poor job of sharing risk or institutionalizing risk-sharing mechanisms in the medium-risk area the way it does for conventional banking. Institutions similar to the FDIC and the FSLIC are generally not available in the middle realm. (Hamlin & Duma, 1999)

Stock and corporate bond markets are forms of financial intermediaries with higher risk than bank deposits. U.S. society has moved toward them as a form of savings. Insurance companies and pension funds, including 401(k)s, have recently broadened their approaches to investing to include this somewhat higher risk investment. Yet, stock and bond markets generally serve the investment needs of higher capitalization businesses, not the kind of business often involved in local brownfield redevelopment. (Hamlin, 1998; Hamlin & Lyons, 2003)

If the need is great, why doesn't middle risk/reward financing of brownfields come into existence on its own in response to market demand? Certainly, higher risk customers would have to pay more or give up more to the risk-taking investor in order to receive capital, but this scenario is well understood in the venture capital process.

To a minor extent, mezzanine financing has grown up naturally. Seed capitalists have developed an array of innovative but ad hoc mechanisms for extracting greater benefit from a deal to compensate for the greater risk. These methods include higher interest rates, equity kickers, and royalty arrangements. Yet, no broad-based and sophisticated intermediary system has ever come into existence without government playing at least two important roles. These roles are (1) legitimizing and sanctioning an institutional structure and process, and (2) sharing some of the risk (Hamlin & Lyons, 2003). These roles are critical to inducing private capital to flow to brownfield projects. The purpose should be to perfect intermediary markets so as to channel funds to businesses at appropriate times and in appropriate amounts. Governments should try to institutionalize a system of mid-risk financing and share some of the risk, where necessary and appropriate.

Governments at all levels have attempted various means to improve the intermediary process in the mid-range of the risk/reward spectrum. Some of these have been used in brownfield redevelopment. They have attempted to channel capital to promising small businesses and projects that are neither eligible for nor fully served by conventional bank lending. They also sometimes target their efforts at particular communities that are perceived as higher risk and therefore have greater difficulties raising investment capital. (Hamlin, 1998)

Methods for providing mid-risk debt capital include direct government loans, revolving loan funds, subordinated loans, loan guarantees, industrial development revenue bonds, loan insurance, bond insurance, secondary money markets, and loans with equity or royalty features, to name a few (Hamlin & Lyons, 2003). Some of these concepts will now briefly be described.

Government grants and loans. Obviously, governments can give grants to projects to reduce the cost of cleanup. The EPA has provided site assessment grants and some types of cleanup grants, and the Clean Michigan Initiative has allocated grant money to clean many sites that have redevelopment promise. As CMI grant funds are nearing exhaustion with little chance for major replenishment, the CMI loan program is becoming more popular. Research has indicated that a high percentage of those sites have been redeveloped to some degree (Mohamed & Dancik, 2007).

Grant and loan programs are not designed to attract private investment capital directly. If their use reduces costs and risks to the appropriate level, private capital might be indirectly induced to finance other aspects of the total redevelopment where they otherwise would not. Yet, direct grant and loan programs are often weak in leveraging private dollars. However, one can never be sure whether the project might have succeeded with a smaller government provision of capital. Also, although the CMI fund is generated by a state bond issue, the ultimate responsibility for repaying those bonds is the state taxpayer. The state is therefore reluctant to replenish the funds, particularly at a time of severe budgetary problems.

Second-position loans. One method to directly leverage private capital is to provide only second-position loan.

In other words, if other lenders are willing to cover about 50 percent of the project cost, the Michigan Department of Environmental Quality loan might cover 40 percent, giving the private lender senior position, or first crack at the collateral if the project fails. This reduces the risk to private capital because of the improved loan-to-value ratio (LTV), thereby attracting greater private debt capital to the project and/or improving the lender's terms. If successful, this process spreads the positive impact of CMI loans to more projects.

Another beneficial effect is that the process induces developers to pursue private capital more aggressively. If private lenders like the project, they may want to increase their stake. On the other hand, if no private lender is willing to support the project, even with a favorable loan-to-value ratio, DEQ would be alerted that the project might have trouble succeeding. Private lenders should be allowed to have equity or royalty kickers to help to compensate for the higher risk. A royalty kicker would allow the lender to receive royalty payments from a highly successful project in addition to debt service.

Loan guarantees. One method to leverage private capital is to use the state bond issue funds to guarantee loans rather than provide direct loans. In this way, debt capital for brownfield projects would come from private investors. Given the size of many brownfield project, this might mean guaranteeing a bond issue rather than a conventional loan. Lenders would be more willing to provide debt capital to the project, since some portion of the debt would be guaranteed by the state, thereby reducing lender risk. The taxpayer would only pay the bill if the project developer/owner failed to repay the loan and collateral recovery methods failed to cover the outstanding balance. Conceivably, the state's money would leverage far more private dollars in this way.

Yet, for government to provide direct or subsidized loans or to guarantee loans for higher risk projects has inherent problems. One issue is the bureaucratic nature of government programs. Since the government is directly at risk, government employees must still do their own financial analysis, duplicating the private lender's efforts. A second concern is the quality or accuracy of that financial analysis. Governments might not have sufficient financial objectivity for proper due diligence. Governments often do not have the expertise to assess (1) the potential of the project, (2) whether the terms of the loan are appropriate for the level of risk, and (3) whether terms and conditions are in line with the prevailing market. For the guarantee program, for example, how much of the loan should be guaranteed and how risky should the loans be that are approved? If the governmental loan analysis is too restrictive, too many projects would be shut out of the process, defeating the purpose. If it is too lenient, too much of the taxpayer funds might be lost.

Moreover, if any of these issues are not well addressed, then government intervention might distort money markets rather than perfect them. Loan and loan guarantee programs might make higher risk borrowing too easy, for example. They might upset the risk/reward balance, inducing borrowers and lenders to take too much risk by going too deeply into debt. This imbalance often hurts borrowers more than it helps, and could create unfair competition for unsubsidized businesses. If they are too anxious to provide funds, those funds may replace private capital that would have been forthcoming. Developers might sense that the funds are easy to receive and not pursue other sources vigorously enough.

Loan Insurance Pooling and Capital Access Programs. One governmental approach to promoting medium-risk/reward financing that might relate to brownfield redevelopment is loan insurance. Loan insurance programs are less invasive and direct than loan guarantees. Like most insurance policies, loan insurance spreads risk among many clients and reduces the cost to each while providing some protection for all. A loan insurance fund or pool becomes an insurance program that is used to cover a lender's losses resulting from a non-performing loan. With this backing, lenders can lend to higher risk customers than they otherwise would. The pool is funded through fees or non-refundable deposits provided by participating higher risk borrowers who are otherwise unable to acquire conventional financing (Hamlin, 1998). This may relate to higher risk companies attempting to operate in brownfield areas, or the potential brownfield status of the project might be the cause of the higher risk rating by lenders. Unlike a loan guarantee, the pool does not just cover the loan in question, but a portfolio of loans that each made similar deposits. The fee level for the purchase of insurance must be in balance with the level of risk created by the loans. A slight excess in inflow of fees would allow the pool to build up over time (Hamlin & Lyons, 2002).

Governments interested in promoting capital flows to medium-risk projects can use loan insurance pools. Loan insurance utilizes market forces, but history tells us that, in order for loan insurance pools to exist, government must be involved. So, how should government carefully intervene in the capital markets to accomplish the public goal of making mid-risk finance applicable to brownfield redevelopment using loan insurance? Programs to do these things are called

Capital Access Programs (CAP), and have sprung up around the country. We will briefly describe how they operate and how they might relate to brownfield redevelopment.

“Capital Access Program” was a name given to a government-sponsored loan insurance pool concept started in Michigan in 1986 when the Great Lakes states were experiencing severe economic restructuring. Use of the concept that started in Michigan has now spread to more than twenty-two other states and two cities. At the end of 1999, the Michigan CAP accounted for about one-third of all CAP loans granted in the nation. New states continue to begin the programs (United States Department of the Treasury, 1998). Michigan suspended its program in 2002, but restarted it in 2006 (Michigan Bankers Association, 2007).

The Capital Access Program of Michigan was, from the beginning, an attempt to address intermediate-risk capital needs by perfecting capital markets with minimal governmental intervention. The program did not target brownfield or inner city projects; the Michigan program has always been one of the most flexible, least targeted, and least restrictive on lender behavior. Many other states have injected additional rules and restrictions, and they sometimes target incentives to specific kinds of projects, such as brownfields (United States Department of the Treasury, 2001).

Programs all over the U.S. have similar characteristics. Some of these common mechanics are described below.

- **Lender participation:** If a lender decides to participate, a special loan-loss reserve fund is set up to cover future losses from a portfolio of participating loans. The fund may be officially owned by the state but earmarked in that lender’s name and deposited with the lender making the loans. Effectively, lenders control the pool within the rules of the program. The lender may withdraw funds from the reserve pool only to cover losses on loans made under the program. As described below, payments are made to the pool each time a loan is made under the program.

  In seeking the loan, the developer or business owner goes directly to a lender, not to the state. If the lender finds that the loan application exhibits too many risk factors for the loan requested (including the risks that brownfield issues create) the lender would decline the loan request but might suggest CAP as an alternative. In that case, the lender would offer a loan with conventional terms and conditions, but with the additional requirement that the business make a non-refundable deposit to the loan-loss reserve pool. The contribution is typically equal to 1.5% to 3.5% of the loan amount. The exact percentage is at the discretion of the lender, within the limits allowed by the state’s program. In fact, all other terms and conditions of the loan might be negotiable between the lender and borrowers to the same degree that they are with any loan. (Hamlin & Duma, 1999; Michigan Jobs Commission, 1995)

- **Contribution to the reserve account:** If everyone agrees to the terms, the lender enrolls the loan in the CAP program and notifies the state. The bank then matches the business’ deposit in the loan-loss fund, and the governmental agency matches the combined business-lender deposit. States typically match private contributions dollar-for-dollar, with many states increasing their matching ratio for target groups or areas, such as brownfield sites. For a Michigan brownfield site, for example the state (perhaps DEQ/CMI) could provide an additional deposit as an incentive to both the lender and the borrower to utilize brownfield sites. State contributions to the reserve funds typically range from 3% to 7% of the loan amount, implying a public leverage of private funding in a range from 33:1 to 14:1 (Osborne & Plasterik, 1997). This range is very high for public incentive programs, but even these ratios do not tell the whole story. These private-dollar leverage ratios assume that the public deposits into loan loss reserve pool are state expenditures. In reality, they are just a deposit into a fund owned by the state (an asset).

- **Non-performing loans***:* If any loan in the portfolio of participating loans stops performing, the lender must go through the normal recovery process, and pursue all remedies available to it, including foreclosure and confiscation of collateral. If the lender ultimately loses money on the loan, the lender has the right to charge the loss against the insurance pool. Some states allow a bank to charge losses off against the pool as soon as the loan is declared in default and then reimburse the pool if some recovery is accomplished (Hamlin, 1998). The collection and claims process is designed to work in a routine, non-bureaucratic way. The lender uses its normal method for determining when and how much to charge on a loan (Michigan Jobs Commission, 1995).

- **Building up the pool:** The program has a snowballing effect. If the lender operates prudently, the insurance pool builds up over time. This increases protection against future losses and provides lenders with greater and greater cover for riskier loans, such as brownfield sites (Hamlin, 1998), “so banks have an incentive to keep adding loans to the program, and to make prudently riskier loans" (Osborne & Plasterik, 1997). But, while earmarked reserves enable lenders to be more aggressive in making loans, their net worth would still be at risk if loss rates were to exceed the coverage provided by the reserve. Thus, a built-in incentive causes lenders to be prudent (Michigan Jobs Commission, 1995).

Conceptually, the pool builds up in layers with the government's deposits at the bottom, the lender's contributions in the middle, and deposits from borrower on top. This means that if the pool is ever called on to cover a bad loan, previous business contributions to the pool (in the top layer) are first to be used. Government contributions to the pool are last to be used and are therefore in the safest position.

- **Flexibility/lack of government involvement:** Because the program is structured to provide a built-in incentive for lenders to be prudent, the governmental agency has little need to review lender-loan decisions the way government must for direct loan and loan guarantee programs. Enrolling loans under the program is designed to work as an essentially automatic process, with no processing delays and little paperwork. (Michigan Jobs Commission, 1995)

  Flexibility is a key characteristic of the program. It is up to the lender to determine how it wants to use the program. The lender sets its own criteria for determining what types of loans to make, as well as interest rates, fees, terms of maturity, collateral requirements, and other conditions. Thus, market mechanisms and forces are allowed to work, and intelligent private sector decision-making is facilitated. Loans can be short-term or long-term, fixed or variable rate, secured or unsecured, first or second position, amortizing or ballooned, term or line-of-credit. (Michigan Jobs Commission, 1995)

  The program's flexibility enables a lender to work with a borrower after the loan is closed. The lender can, for example, recast the loan as often as appropriate. It can extend the term of the loan, amend covenants, release collateral, or work with the borrower in a variety of ways normal to most loans. These adjustments may be carried out without obtaining approval from the state, or, in most cases, even reporting the changes unless additional deposits to the pool are necessary (Michigan Jobs Commission, 1995). The lender also has the flexibility to refinance the loan, and may add funds. If the total amount of the refinanced loan does not exceed the previously covered amount, no new premium payments need to be made into the reserve fund. The refinancing does not typically need to be reported to the state (Michigan Jobs Commission, 1995).

- **Partial participation:** The lender has the option of enrolling less than the full amount of the loan in the insurance program. Borrower and lender premiums would then be based on this smaller enrollment amount. For example, if a lender makes a $1,000,000 loan, but is convinced that the maximum loss on the loan would be $600,000, the lender could specify to include only $600,000 of the loan in CAP. In such an event, the funds in the reserve pool would be used to cover the first $600,000 in principal loss on the loan, plus accrued interest, plus documented out out-of-pocket expenses (Michigan Jobs Commission, 1995). If brownfield loans were given special treatment, the loan's participation in CAP could be split as described here to separate eligible costs from non-eligible costs.

- **Avoiding loans eligible for conventional financing:** Because of the payments that need to be made into the reserve, a loan to a brownfield project made under CAP is likely to be more expensive to the borrower than a conventional bank loan. Thus, borrowers who can obtain conventional financing to meet their needs would logically be better off with conventional terms. Theoretically, competition within the lending industry will steer such borrowers to conventional financing. A 1998 study of the Michigan Capital Access Program verified this behavior (Hamlin, 1998). In reality, financing under the CAP is likely to be less expensive than from some alternative non-bank sources (Michigan Jobs Commission, 1995).

- **Eligibility:** In many states, all kinds of businesses are eligible (United States Department of the Treasury, 1999). The fundamental thrust of the program is to make eligibility as broad-based as possible in order to maximize the effect on the state or local economy and avoid second guessing market decisions. The borrower can be a corporation, partnership, joint venture, or sole proprietor. Some states even allow cooperatives or non-profits. Some states impose restrictions on the loan size, while other states restrict the size of the borrowing business to ensure that the assistance goes to smaller businesses (United States Department of the Treasury, 1999). Michigan has placed no limits of the borrower size or loan sizes (Hamlin, 1998), though the state claimed that the structure of the program tended to focus the program on assisting small- and medium-sized companies. Michigan did limit the amount it would pay into any lender's loan loss reserve pool in support of participating loans for any one borrower.

Michigan Brownfield CAP Proposal

If DEQ/CMI provides direct grants and loans to brownfield projects, all of the potential difficulties mentioned above in the discussion of loan guarantees would apply. Furthermore, in this time of extreme budget constraints, direct grants and loans exhaust state bond issue funds quickly. A better approach might be for the CMI brownfield redevelopment funds to be used in innovative ways in order to leverage greater amounts of private debt capital.

As an example, a combination of financing schemes could be use. Imagine a brownfield redevelopment project in which a small brownfield grant was given to the municipality to facilitate clean up, site preparation, and infrastructure modernization in order to help level the playing field with greenfield sites. Then, imagine a loan package is put together for the redevelopment. A CMI brownfield redevelopment loan with highly favorable, subsidized terms might be offered to the developer as a second position loan to cover about 40% of the project cost if the project can acquire a first mortgage from a private lender. The first mortgage could be a CAP loan if necessary. In that case, the developer, the lender, and the state would pay fees into the lender's loan insurance pool. The state deposit might be twice the normal amount for brownfield project loan and might come from CMI funds. If the project were reasonably sound, private lenders would be induced to provide the first mortgage because they would have a highly favorable loan-to-value ratio and the loan would be insured through CAP.

Important Findings

Perception of Success: Need to Continue a Strong Brownfield Program

In brief, nearly every stakeholder sees the Michigan brownfield effort as essential to the state's future and perceives the Michigan program as having an effect worthy of resources invested. Both the environmental and economic objectives of the brownfield program are critical to the state's development. The private sector will not create inner-city redevelopment of obsolete areas or clean up contaminated sites without incentives, and, as an older industrial state, Michigan is full of such sites, located in areas essential to the state's future progress. Many professional functionaries feel that Michigan's program is superior to the efforts of other states. Michigan's program continues to be a national leader, they feel, because it addresses both the risk and the reward side of the equation.

Closing the Risk/Reward Gap

Key to this success is the program's attack on both the risk and the reward side of the developer/investor risk/reward equation. The "lynch pin" is limiting the liability for cleanup faced by non-guilty property owners through the baseline environmental assessment process and reducing redevelopment costs by allowing cleanup to standards befitting future use. These aspects of the program are often seen by BRA directors to be more important than the public incentives promoting redevelopment.

From the developer's perspective, the risks are still great vis-à-vis the potential rewards. However, momentum seems to be growing in active communities as developers learn more about processes and potentials. About 30% of the active communities that were included in the study expressed that they felt they were reaching a tipping point. More and more developers are coming to them to initiate the process rather than the community pursuing redevelopment of cornerstone sites.

Environmental Goals Should Not Be Lost; Due Care Plans Should Be Monitored

Limiting developer liability through baseline environmental assessments is seen as key to getting the risk/reward ratio into balance, and the concept of due care plans is seen as a way of ensuring that environmental goals are met as a counter-balance to this liability limit. But many, including BRA directors and state officials, have concerns about the enforcement of due-care activities. With so many jurisdictions involved in a single project, and with complex and changing ownership of such projects, some fear that monitoring and enforcement of due care might be lax, leading to environmental problems in the future. To prevent this, some mechanism to both staff and finance governmental oversight are suggested. One approach is to have the flexibility and the mandate for the developer and/or the community to put some money in escrow to cover the cost of future follow-up inspections and reports. These funds might come from, and be a legitimate cost of, brownfield TIF recapture, or they might be a legitimate cost included in a Clean Michigan Initiative loan.

Economic Development (With Some Clean-up)

A critical issue for understanding the attitude and behavior of all interested parties is whether the Michigan brownfield program is perceived as primarily a public health or an economic development program. We found that, overwhelmingly, it is perceived primarily as an economic development program that must deal with environmental contamination in order to promote redevelopment. In fact, the various aspects of the Michigan brownfield program are seen as one of many economic development tools in the economic developer's toolbox. Many BRA boards are simply the local EDC board meeting at a different time, and most BRAs are staffed by the same economic developers who staff the EDC.

Community leaders appreciate the SBT/MBT tax credit, the Brownfield Redevelopment Financing Act tax increment financing program, and the Clean Michigan Initiative grants, but they perceive these as just another set of economic development incentives. Surprisingly, these Act 381/382 programs are often a minor part of brownfield projects.

The transformation of the Michigan brownfield program from a public health to an economic development program can be seen in the attitudes of citizens and professionals alike. It can also be observed in the gradual policy changes that have taken place from 1995 to the present. This transition has political as well as policy consequences that may be described as both good and bad (Hula, 2001).

Extensive Use of All Kind of Public-Private Partnerships

Most brownfield projects employ a wide variety of federal incentives or state-enabled local economic development provisions to induce businesses and investors to complete redevelopment. The redevelopment package is fashioned to meet the specific situation without regard to whether the financing and planning initiatives are specifically brownfield or not.

High Value Sites: Downtown, Not Fringe Industrial Sites

The sites being redeveloped are not the most contaminated, but the ones most in demand by developers. This includes locations near waterfronts, on the fringe of viable downtowns, adjacent to major universities, or other high value locations. In terms of the number of projects, industrial redevelopment ranks low. The risk/reward gap can only be closed in situations where developers perceive future rewards to be large. Fringe industrial sites seldom offer that calculus.

Greater Flexibility For the Use of TIF Capture, Including Purchase of Property

Many BRA staff see themselves as public sector developers, wanting to make deals and get things built. When suggesting changes in the brownfield program, they focus on greater flexibility in the eligible uses of brownfield funds, particularly any excess capture after eligible costs are covered. One suggested use is to allow BRAs to use excess capture to buy properties in a redevelopment zone in order to have more leverage in the overall redevelopment process, creating momentum and tipping points that stimulate private development.

Evaluation

The Michigan brownfield program needs more evaluation of individual projects and state-wide program components to know which strategies are working. Currently, program data is scattered between several agencies, and neither state nor local staff have the time to evaluate projects or programs. The evaluation that is being done at the local level is minimal and is more process- than outcome-oriented.

Training

Clearly, active communities have entrepreneurial leaders who seek out and ride herd on complex projects, sometimes for years, to bring them to fruition. This is a difficult skill to transfer. Training for BRA staff should include more than just what programs exist and how to use them. Training should include internships, mentoring, study of best practices and cases, evaluative research, and community short-term job swapping.

Leverage of Private Capital: Utilization of Market Forces

While the task of brownfield redevelopment is important enough and has a high enough benefit/cost ratio to command public dollars, budget and political realities make it necessary to seek the maximum private leverage for every public dollar. State bond issue funds, for example, should be used more effectively to induce private debt and equity capital to flow to brownfield projects. This can be done by using governmental powers to reduce risk as well as reduce the costs of and rewards for the redevelopment of brownfield sites. Rather than provide direct grants or loans, funds can be used to provide loan insurance, loan guarantees, second position loans, convertible stock with buyback provisions, loans with royalty kickers, and other credit enhancements.

Political Shift: Need for Education

Some evidence has emerged that the general public has become more negative about their perception of the brownfield program just at the time that redevelopment success seems to be accelerating. This negative attitude may be a part of a general political trend. Evidence is emerging that a feeling among the general public against extensive governmental involvement in urban redevelopment is growing.

These political changes, if real, might be the result of the shift in program emphasis from environment and public health to economic development. Although the general public seems to maintain a positive attitude about many environmental issues and efforts, economic development initiatives bring more cynicism. The general public might find it easier to support what they perceive as the expenditure of "taxpayer dollars" for environmental cleanup and health promotion, but are not as enthusiastic about governmental action that is sometime perceived as "lining a developer's pockets."

Local and state officials need to do a better job educating Michigan's citizens about the benefits of brownfield redevelopment. They need to better emphasize the link between the economic and environmental aspects of the program. The public needs to understand that redevelopment of core cities is necessary to effectuate environmental cleanup. Private money needs to be one component of environmental remediation resources, and private capital must receive a return on investment from a successful redevelopment project.

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