RACINE INTERGOVERNMENTAL RELATIONS STUDY

City of Racine Racine County, Wisconsin

FINAL REPORT

AUGUST 2000

Racine Intergovernmental Relations Study

City of Racine Racine County, Wisconsin

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EXECUTIVE SUMMARY

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INTRODUCTION

Throughout the past decade the City of Racine has experienced economic decline and an increased concentration of poverty, while the suburbs have attracted higher income residents and additional commercial and industrial development. Although development continues to occur in the Racine area, the distribution of development has been uneven, with the majority of it occurring in the areas surrounding the City of Racine. Because of the increasing development pressure in the suburban municipalities and the relative decline of the City of Racine, several intergovernmental relations issues have become of concern to local elected officials, business and industrial leaders, and interested citizens.

Despite the divergence in economic fortune, the municipalities of Eastern Racine County remain interdependent due to geographic proximity and shared services. Their interdependence makes it imperative to find solutions that benefit all parties and improve intergovernmental cooperation. At the same time, the vast difference in their respective situations means that each municipality has potentially conflicting goals. On one hand, the City of Racine wants to be assured of adequate compensation for the services it provides and be protected from a continued loss of property tax revenues to its suburbs. On the other hand, the rapidly developing suburbs desire services to support new development and the ability to incorporate in order to have control over such development.

One particular issue is the extension of additional sewer and water service to new development in the surrounding municipalities. Currently, the City of Racine supplies sewer and water service to many of the surrounding municipalities. The previous sewer service agreement expired in 1996 and a new agreement is currently under negotiation. At issue is the allocation of costs for a \$75 million upgrade and expansion to the City wastewater treatment facility and trunk sewer system. An upgrade and expansion is desperately needed in order to continue quality service to existing customers, and provide new sewer service to developing areas in the suburbs.

A second issue to be considered is the issue of equity in the sharing of costs associated with the provision of public services that benefit multiple communities. For example, the City provides a large public library and a transit system that are used by residents of other municipalities in Eastern Racine County. In addition, the City partially funds the Racine Zoological Gardens and the Charles A. Wustum Museum of Fine Arts, also enjoyed by residents of other communities. Communities that benefit from the additional services the City of Racine provides should bear a portion of the expenses associated with the financing, operation and maintenance of such services.

Another issue is the impact of development on the local street and highway systems. As new development alters land use patterns in Racine County, the associated traffic patterns change as well, transforming local streets to regional transportation routes and vice versa. Due to changes in traffic patterns it may be appropriate to consider changing the jurisdiction of certain segments of arterial streets and highways in order to provide for greater equity in the fiscal responsibility of maintaining such streets and highways. The Regional Transportation System Plan completed by the Southeastern Wisconsin Regional Planning Commission (SEWRPC), recommended several such jurisdictional transfers for Eastern Racine County. One issue to consider before making any transfers, is how such transfers would shift the fiscal responsibilities for maintaining the area's transportation network.

Yet another issue is the increased potential for costly and disruptive boundary disputes as land between the City of Racine and Interstate Highway 94 continues to develop. The City of Racine has limited potential for new development within its current boundaries and no access to developable land directly adjacent to I-94. As the City of Racine and the Village of Sturtevant develop, surrounding towns are concerned about protecting their boundaries from annexation. To guarantee this protection, the Town of Mount Pleasant and the Town of Caledonia are seeking to incorporate in order to prevent further annexations.

The issues discussed previously are not unique to the Eastern Racine County area. Some common themes in the literature on city-suburban relations are the relative inability of central cities to compete for new commercial and manufacturing development. Other problems that larger cities face include the loss of higher-income households to the suburbs, the struggle to continue providing services with a deteriorating property tax base, equitable means of providing area-wide services, and boundary and annexation disputes. These phenomena are interrelated and the presence of one can lead to the appearance of another, which in turn can accelerate the decline of the central city. As the central city declines and the suburbs continue to grow, the need for intergovernmental cooperation increases even as the common ground for such cooperation appears to erode. While it is difficult to identify the initial cause of decline amongst multiple, interrelated causes; the effects can be observed in changes in the fiscal health of central cities when compared to their suburbs.

Fiscal capacity may be defined as the relative strength of a municipal tax base in terms of its ability to support a given level of municipal services, and is measured in terms of equalized property value on a per capita basis. Fiscal capacity determines the level of services per capita that can be provided at a given tax rate. Alternatively, fiscal capacity determines what tax rate is needed to provide a given level of services per capita. If two municipalities provide the same level of services per capita, the municipality with the higher fiscal capacity will have the lower tax rate. In many cases, the fiscal capacity of large cities is low, and stagnant or declining, while those of surrounding communities are large and growing. Overall, lower fiscal capacities and higher tax rates put central cities at a disadvantage when competing with suburbs for new development. This cycle of deteriorating fiscal capacity and reduced ability to compete for development leads to increasing disparities between central cities and suburbs.

Certain types of development, particularly high value business and industrial parks, tend to generate property tax revenues that exceed the cost of providing services to these properties. These types of development increase the municipality's fiscal capacity without adding proportionately to the cost of providing services. This allows municipalities that attract these types of development to offer a given level of service at a lower property tax rate.

Growth in the suburbs is often facilitated when the central city of a metropolitan area extends water and sewer service to the surrounding area, without requiring annexation. When the water and wastewater facilities serving the surrounding municipalities are built by the central city and designed with excess capacity to accommodate future growth, the city ratepayers generally carry the capital costs related to the excess capacity, until such time as new development occurs.

In addition to the provision of water and sewer service, central cities often provide certain other amenities to the surrounding area without being adequately compensated by the recipient communities. Cultural, recreational and transportation amenities benefit the surrounding communities and increase their appeal as desirable places for the location of business and residential development. When cities provide services or amenities without adequate compensation, and carry the costs of excess water and wastewater treatment facility capacity,

they in effect subsidize growth in the suburbs. This in turn contributes to the fiscal disparities between cities and their suburbs.

The City of Racine retained the firm of Ruekert/Mielke to conduct a study addressing:

- 1. The provision of services to the surrounding municipalities;
- 2. Methods for reducing competition for commercial and industrial development between the City and the municipalities;
- 3. The establishment of boundary agreements and support for incorporation by the Towns of Caledonia and Mount Pleasant.

The study was undertaken during 1998, 1999, and 2000, with the first task being to examine the existing methods of funding public services in Eastern Racine County. The second task was to quantify fiscal capacity disparities and evaluate the extent to which existing revenue sharing programs and state aids alleviate these disparities. The third task was to identify potential boundary adjustments between Eastern Racine County municipalities as a prelude to incorporation by the Towns. The fourth task was to identify and evaluate potential strategies for enhancing fiscal parity, achieving more equitable sharing of the costs of providing public services, establishing boundary agreements, and generally improving intergovernmental cooperation in the area.

The study focused on the municipalities in Eastern Racine County that are current, or future, customers of the City Sewer Utility. The municipalities identified for this study are the following: Town of Caledonia, Town of Mount Pleasant, Town of Raymond, Town of Yorkville, Village of Elmwood Park, Village of North Bay, Village of Sturtevant, and Village of Wind Point. These municipalities are located adjacent to or near the City and are beneficiaries of the City's extension of sewer service. Their proximity to the City and the I-94 corridor, as well as the provision of sewer service, makes them likely competitors with the City for new commercial, industrial and high-value residential development. In addition, their residents are also likely to use and benefit from the City's cultural, recreational and transportation amenities.

The County Executive, along with the Executive Director of the Southeastern Wisconsin Regional Planning Commission (SEWRPC), viewed this study as an opportunity to bring the municipalities together to discuss these critical regional issues. A group was formed consisting of the chief elected official from each participating municipality along with the County Executive, the Chairman of the County Board, and the Executive Director of SEWRPC. This group requested that all draft studies and data be submitted and discussed prior to any decisions or actions being taken by the City. The City agreed with this approach and the group began meeting on a monthly basis starting in September 1998. Each issue was studied and a memo was drafted, presented to the group, and then amended based on direction from the group. This report summarizes the findings of the studies and the overall strategy recommended for resolving the intergovernmental relations issues identified by the group. Each of the memos reviewed is attached as an appendix to this summary report.

The first part of the study examined fiscal capacity disparities and the changes in these disparities over time, between the City of Racine and surrounding municipalities. It also quantified the extent to which the State of Wisconsin Shared Revenue Program reduces these disparities. Data for these analyses were obtained from the Wisconsin Departments of Revenue and Administration.

Next, the study examined the provision of public services or amenities utilized by Racine County residents. In particular, the proposed upgrade and expansion to the Racine Wastewater

Treatment Facility and interceptor system, the Racine Public Library, the Racine Zoological Gardens, the Racine Area Transit System, and the Charles A. Wustum Museum of Fine Arts. The study included the preparation of a cost-of-service analysis in order to develop a fair method for allocating capital costs relating to the proposed \$75 million upgrade and expansion to the City wastewater treatment facility and trunk sewer system. The study also examined services provided by the Racine County Sheriff's Department to the City of Racine and the fiscal impacts on each municipality, and on Racine County, of implementing the jurisdictional highway transfers recommended in <u>A Regional Transportation System Plan for Southeastern Wisconsin: 2020</u>. Additional discussions were held with respect to consolidating the provision of health department and dispatch services, and a study was completed on the fiscal and operational benefits of implementing a consolidated County Dispatch Service. As part of the study, Ruekert/Mielke met with the municipalities interested in pursuing boundary agreements and incorporation, and drafted maps of the proposed boundaries for each municipality under such agreements.

Finally, the study summarized the findings with respect to fiscal capacity disparities and the provision of services in Eastern Racine County. An overall method for attaining greater intergovernmental cooperation and more equitable sharing of the costs of regional services and facilities was recommended. This evaluation took into account the organizational structure of the agencies providing the services, the existing governmental structure in Racine County, the Wisconsin Statutes, and the experiences of other metropolitan areas in the country.

The entire study consists of this summary report and twelve separate reports that are included as appendices. What follows is a brief summary of the findings and recommendations of the study.

FISCAL CAPACITY

Fiscal Capacity Disparities in Eastern Racine County

In 1998 Racine had the lowest equalized value per capita of all communities in Eastern Racine County, as shown in Table 1. The gap between the fiscal capacity of Racine and other communities in the area ranges from \$20,990 to \$61,529 per capita. In terms of equalized value, even the poorest of these communities had a per capita equalized value that was 73% higher than Racine. Between 1990 and 1998 the fiscal capacity gap widened between Racine and all of the surrounding communities, as shown in Table 2. In part as a result of these fiscal capacity disparities, the City has a property tax rate that is from two to six times higher than tax rates in surrounding communities (Table 3).

Within the last decade, the gap in fiscal capacity and the resultant variation in property tax rates have put the City at a disadvantage when competing for commercial and manufacturing development. Between 1990 and 1998, total equalized value of manufacturing and commercial property in the City of Racine increased by only 27%, while that of most surrounding communities increased by more than 50% (Table 4). Considering general price inflation during this period, Racine has experienced very little growth in manufacturing and commercial property value. Although the City of Racine did experience some increase in manufacturing and commercial equalized value per capita, the surrounding communities that have land available for development experienced significantly larger increases than did Racine (Table 5). As a result of the City's relative inability to compete with the surrounding communities for manufacturing and commercial development, the area's share of manufacturing and commercial property value located in the City fell from 62% in 1990 to only 50% in 1998.

Not only have the suburbs been successful at attracting manufacturing and commercial development, but they have also shown success attracting high-income residents and higher priced residential development. In contrast property values and household income have

remained relatively low for residents in the City of Racine. Between 1990 and 1998, the gap between the equalized value per capita of residential property in the suburbs, versus the City of Racine, increased for all of the surrounding municipalities, as displayed in Table 6. In 1990, the median household income for Racine County was \$32,751, while the median household income for City of Racine residents was \$26,540. As suburbs grow, low-value residential properties and low-income households become concentrated in the central city, increasing the burden to provide more services with less fiscal capacity.

PROVISION AND FUNDING OF PUBLIC SERVICES

Wastewater Treatment Facility

Allocation of Capital Costs for the Expansion and Upgrade

A Facilities Plan for the Racine Wastewater Utility was prepared in 1998, and has since been approved by the Wisconsin Department of Natural Resources. The Plan recommends approximately \$67 million in capital improvements for expansion of and upgrades to the wastewater treatment facility, and approximately \$8 million in trunk sewer improvements. In addition, the Plan recommends approximately \$6 million in local cost for system-wide clear water infiltration and inflow reduction.

Ruekert/Mielke conducted a study to review various institutional arrangements for the management and funding of wastewater treatment services. As an alternative to the current system of intermunicipal contracts, the study examined a variety of options for an area-wide authority. Some of the options that were considered include a metropolitan sewerage district, a joint sewerage commission or a county-owned sewerage system. The study proposed a continuation of the current system of intermunicipal contracts with capital costs shared according to a method patterned after the one used for the Fox River Water Pollution Control Center, managed by the City of Brookfield (the Brookfield Model). Under this plan, the City of Racine would continue to manage the Racine Wastewater Utility and oversee the expansion and upgrade of the facility. Each community served would receive capacity rights based upon their future design flows projected in the Facility Plan, and would then have the right to discharge waste up to the amount of capacity allocation they purchased. They could discharge this amount immediately or increase gradually with the option to sell unused capacity to other sewer service area municipalities.

In exchange for capacity rights, each community would pay for its share of the project costs according to a cost of service allocation prepared by Ruekert/Mielke The cost of service study was prepared in order to determine a fair allocation of capital costs to communities served by the Wastewater Treatment system. This analysis involved examination of all the individual components of the system improvements, and an allocation of the costs based upon the design criteria and existing and future design flows for communities served. The analysis was presented in a report titled "A Cost of Service Based Capital Cost Allocation Model for Expansion and Upgrade of the Racine Wastewater Treatment Facility" and is included as Appendix 1.

Based upon the Facility Plan, it has been proposed that each community served receive capacity rights in the upgraded and expanded Wastewater Treatment Facility as outlined in Table 7. The communities cost allocations, developed in the cost of service study, are shown in Table 8. Each community served would be responsible for payment of the costs outlined in Table 8, in exchange for the capacity rights set out in Table 7. It is assumed that the project will be financed through the Wisconsin Clean Water Fund, which will provide 20 year financing at subsidized interest rates.

Two communities (Yorkville and Raymond) that have allocated capacity are not presently served by the Racine Wastewater Utility, and, therefore, do not have a current user base. The Town of Raymond will eventually connect to the Town of Caledonia sewer system, and the Town of Yorkville flows will connect to the Town of Mount Pleasant sewer system. The two municipalities do not want to pay for capacity rights until such time as they connect to the system. Therefore, some other entity, or entities, will have to carry the capacity costs until the municipalities are served.

One alternative would be to have the towns providing the trunk sewer service to Raymond and Yorkville, prior to Racine connection and purchase the capacity rights allocated for Raymond and Yorkville. Those costs would then be included in the conveyance agreements between the towns, which will need to be drafted when the Town of Raymond and the Town of Yorkville wish to receive sewer service. A second alternative would be for the Racine Wastewater Utility to purchase the capacity rights for the two towns, and pay for the costs with user charges, until the towns wish to receive service. A third alternative would be to have each of the existing customers of the Racine Wastewater Utility, including the City of Racine, purchase a portion of the capacity allocated for Raymond and Yorkville and hold that capacity until the towns connect to the system. The initial purchase of the capacity for the Town of Raymond and the Town of Yorkville will be negotiated as part of the sewer service contracts.

RACINE PUBLIC LIBRARY

Services Provided and Current Funding Arrangements

The Racine Public Library provides a variety of library services for the City of Racine and surrounding area. In recent years the number of annual library loans, including interlibrary loans, has been approximately one million volumes. The majority of loans are made to City of Racine residents, but library users come from throughout Racine County, and even from Walworth County and Kenosha County. The Racine Public Library is part of the Lakeshores Library System (LLS), which encompasses Racine County and Walworth County. The twelve Racine County municipalities in the system that do not have their own libraries pay a county Special Levy for Library Services. The LLS collects this money and redistributes it to libraries in the system to compensate them for use by residents of municipalities without libraries.

The Public Library relies on a number of state and local sources to fund its operations. Approximately 14% of the library's income is from a combination of fines and fees, State aid, a contract with Kenosha County, carryover from the prior year, and trust funds and gifts. The distribution of the county library tax from the Lakeshores Library System comprises another 22% of the library's annual revenues. Approximately 64% of total funding comes from the City of Racine. Of the net funding from local municipal sources, the City of Racine contributes approximately 74%, while the County library tax distribution supplies the other 26%. An analysis of existing and alternative library funding arrangements was presented in a report titled "An Intermunicipal Cost Sharing Analysis for Services Provided By the Racine Public Library", and is included as Appendix 2.

Utilization by Residents of Other Municipalities

A significantly large share of the Racine Public Library use and circulation is attributable to residents of municipalities other than the City of Racine. The largest users of the library are the City of Racine, the Town of Caledonia and the Town of Mount Pleasant. City of Racine residents account for 55-59% of total library circulation, while residents of communities in Racine County without their own library account for approximately 39-42% of circulation. The remaining circulation is to residents of other communities in Racine County with their own libraries, and to residents of other counties. For the communities adjacent to the City of Racine,

the usage of the Library per capita is higher than Racine's. For example, the Village of North Bay averages over 14 transactions per capita per year while the City of Racine averages just over 6 transactions per capita per year.

Operating Cost Funding Shortfall

Racine County provides a portion of the funds necessary to serve residents of other municipalities and county funding for the Library has increased slightly in recent years, from 21% in 1995 to approximately 26% of local funding in 1998. However, the County still falls significantly short of reimbursing the City for library services provided to non-city residents. Table 9 displays the actual level of County funding over the last four years, and the amount that would have been funded if the County reimbursed the City in proportion to the percentage of library usage by non-city residents. In 1998 the City of Racine paid \$457,000 more under the current funding system then it would have if the County fully compensated the City for library services provided to residents of other municipalities.

Capital Costs Funding Shortfall

Racine County or the surrounding communities currently do not compensate the City for any capital costs relating to the Library. The most recent \$8.9 million expansion of the Library was funded by the City of Racine. The annual amortization of the initial capital cost, including interest, that the City invested in 1992 for the library facility would be approximately \$556,000 per year. This computed annual capital cost can be allocated based upon each municipality's share of circulation. Based upon this analysis, the City should recover approximately \$240,000 per year from the surrounding communities in addition to the operating cost reimbursement.

In total, the City has been providing a subsidized library service benefit, valued at a total of approximately \$697,000 annually, to the surrounding municipalities without receiving compensation for these services.

Recommendation

It is recommended that sewer service area communities, whose residents account for a majority of library usage by non-city residents, share in the local funding shortfall for operating and capital costs. Based on costs and circulation data for 1998, the City's library operating and capital costs could be shared among the communities concerned, as shown in Table 10. A cost-sharing arrangement such as that shown in Table 10 would allow the City to recover its annual subsidy for library services to other communities. The actual payment for each municipality would need to be recalculated each year based on actual circulation records and library funding for the prior year. If the County's contribution to the Library system increased, the payments required from the municipalities would decrease.

RACINE ZOOLOGICAL GARDENS

Services Provided and Current Funding Arrangements

The City of Racine is home to the Racine Zoological Gardens, one of the few remaining free admission zoos in the country. An analysis of funding options for the Zoo was presented in a report titled "An Intermunicipal Cost Sharing Analysis for Services Provided by the Racine Zoological Gardens", and included as Appendix 3. Currently, operating revenues for the Zoo come from multiple sources, including donations, special events, memberships, concessions, vending operations and gift shop sales. Since the Zoo does not charge admission, operating revenues cover less than 40% of operating expenses. For the 1998 and 1999 budgets, operating revenues fell short of meeting operating expenses by approximately \$575,000 per year. The City

of Racine currently contributes a subsidy of \$475,000 annually, or about 83% of the total local governmental subsidies. Racine County has included in their budget, a \$100,000 contribution in 1999 that will account for 17% of the total subsidy.

City of Racine residents also contribute to the County subsidy of the Zoo through their county property taxes. The City of Racine accounted for 30% of all equalized value in the County in 1998. Therefore, City property taxpayers contributed \$30,375, or approximately 30%, of the County's subsidy for the Zoo in 1998. In total, City of Racine residents paid for \$505,375, or 88% of the 1998 subsidy, while residents of the rest of the County contributed a total of \$69,625, as shown in Table 11.

<u>Utilization by Residents of Other Municipalities</u>

A 1997 survey of visitors to the Racine Zoological Gardens found that City of Racine residents account for approximately 31% of all visitors to the zoo. Residents of other municipalities in the County made up approximately 14% of visitors and the remaining 55% of visitors were from other counties or did not answer the residence question. Because more than two-thirds of zoo visitors come from outside the City of Racine, the 1997 report concluded that there is a clear case for financial support for the Zoo from outside the City of Racine.

Recommendation

The Racine Zoological Gardens are a regional facility enjoyed by residents Countywide; therefore, it is recommended that the municipalities in Eastern Racine County share in the \$475,000 annual funding currently provided by the City of Racine. This would be a fair arrangement since it is likely that the residents of Eastern Racine County, due to close proximity, use the zoo more often than the residents of Western Racine County. Under this arrangement, the County would continue to provide some level of support and Eastern Racine County municipalities could share in the remaining funding shortfall on the basis of equalized property values. Table 12 displays the actual 1998 contribution of each of the municipalities in Eastern Racine County, the contribution that would be required under the recommended funding plan, and the difference between the two funding levels. As can be seen from this example, the recommended contributions would reimburse the City of Racine for approximately \$274,000 of its annual contribution. The actual amount contributed by each municipality would be calculated on an annual basis using the current budgeted City of Racine contribution and current equalized values.

CHARLES A. WUSTUM MUSEUM OF FINE ARTS

Services Provided and Current Funding Arrangements

The Charles A. Wustum Museum of Fine Arts, located in a 13-acre park setting on Northwestern Avenue in the City of Racine, offers free admission to Museum exhibits and a variety of art classes to residents of the City, County, and region. The farmhouse and grounds that house the Museum were donated to the City of Racine for the purpose of creating an art museum. The Wustum Museum Art Association operates the Museum under contract with the City. The City provides the building and the grounds free of charge, performs major maintenance, and provides an annual operating subsidy. The Association has general operating control of the Museum and raises the majority of its operating revenue.

An analysis of alternative funding options for museum services was presented in a report titled "An Intermunicipal Cost Sharing Analysis for Services Provided by the Wustum Museum of Fine Arts", and is included as Appendix 4. The Association contribution includes funds raised through tuition from art classes, gifts and grants, fund raising, membership fees, exhibition sales,

interest income, and auxiliary activities. The Association's revenues account for approximately 70% of the Museum's total annual revenues. The City's contribution, including maintenance services, comprises the remaining 30% of the Museum's annual operating revenues. Under the 1999 budget, the City's contribution will total approximately \$198,000.

<u>Utilization by Residents of Other Municipalities</u>

The most recent report on Museum membership and attendance was conducted in 1990. This report states that City residents comprised 45% of museum members, while residents of other parts of the County accounted for 38% of membership and the remaining 17% of museum members were from outside Racine County. The Museum Association does not have current data on the residence of museum visitors, but believes that attendance patterns are likely to follow membership patterns. With its national and regional recognition, and wide membership base, the Museum is clearly a regional facility and serves an area larger than the City of Racine.

Recommendation

As an alternative to current funding arrangements, it is recommended that the City enter into intermunicipal revenue sharing agreements with municipalities in Eastern Racine County. Under such an agreement each municipality would make a payment to the City to compensate for a share of the museum funding currently being provided by the City. The contribution from each municipality would be based on its share of the total equalized values of the participating municipalities. Under this arrangement the City would continue its annual contribution to the Association, and the Museum would continue to operate under the existing contract between the City and the Association.

Based on the 1998 total equalized value of Eastern Racine County municipalities, the funding arrangement mentioned above would result in reimbursement of approximately \$114,000 of the City's annual museum subsidy, shown in Table 13.

Currently, the Association is considering plans to relocate to a larger facility in downtown Racine. Preliminary estimates indicate that operating costs for the expanded facility would require approximately \$200,000 additional annual funding. The Association may request some additional funding from the City and the remainder from Racine County.

If the Eastern Racine County municipalities agree to fund the Museum, the agreements should contain provisions detailing how additional funding requests from the Association will be handled. If the City receives a request for additional funding, municipalities involved should be included in the decision about the level of funding that will be provided. To address this concern, it is also recommended that those municipalities participating in Museum funding have a representative on the Museum Board of Directors.

Capital Costs

Over the past twelve years, the City of Racine has expended more than \$500,000 for significant, long-term capital improvements to the museum buildings and grounds. It may be appropriate for the participating municipalities to reimburse the City for a share of these capital expenses, as well as future capital expenditures, in addition to the annual operating subsidy. Using the same methodology as above, the participating municipalities would reimburse the City for a total of approximately \$23,000 per year for prior capital expenditures as shown in Table 14.

RACINE AREA TRANSIT SYSTEM

Services Provided and Current Funding Arrangements

The City of Racine owns the Belle Urban System, the Racine area transit system, which provides 11 regular routes, a downtown circular, and two tripper routes to outlying destinations. In addition to routes within the City, the system extends routes into North Bay, Elmwood Park, the Village of Sturtevant, the Town of Caledonia, the Town of Mount Pleasant, and the University of Wisconsin at Parkside. The City contracts with a private firm for operation of the system. An analysis of the existing funding arrangement for the system was provided in a report titled "An Intermunicipal Cost Sharing Analysis for Services Provided By the Belle Urban Transit System". This report is included as Appendix 5.

Funding for the system comes from farebox revenues, state and federal aids, and local funds. In recent years, farebox and miscellaneous revenues have accounted for approximately 21% of the total annual revenues. A public subsidy is required to fund the other 79% of cash operating costs (operating costs less depreciation). This subsidy is funded through state and federal aids and local property taxes. Federal funds cover approximately 80% of all capital costs, with the remaining 20% covered by local funds.

The City negotiates annual contracts with the Village of Sturtevant, the Town of Mount Pleasant, the Town of Caledonia, and the University of Wisconsin at Parkside to recover some of the costs of routes serving these areas. Each community is billed quarterly for its share of the operating deficit associated with the route servicing its area. The formula is based on the system-wide average cost per route mile, including capital costs, the system-wide average revenue per mile, the system-wide percentage share of state and federal subsidies and the number of route miles serving a particular community. It is assumed that each municipality benefits from the transit service in proportion to the number of route miles served within its municipal boundaries.

The City currently operates one route outside of the City limits for which it does not recover operating costs from the municipalities served. Route 20 provides weekday service between Racine and the Grandview Industrial Park, located west of Interstate 94. The City currently funds the entire route, although the route provides service to the Town of Mount Pleasant and the Village of Sturtevant. Based on annual operating costs of \$36,000 for Route 20 and the service miles for each community, the City is providing a subsidy of approximately \$25,000 per year, as calculated in Table 15.

Recommendation

It is recommended that Racine County, the City of Racine, and the municipalities served by the Belle Urban Transit System consider an ownership transfer of the entire system to Racine County or a newly created regional transit authority. Although the current method of cost recovery is relatively straightforward and allows the City to recover the approximate cost of the service it provides, much inefficiency is created which could be remedied through an ownership transfer.

A transfer of the transit system would address the inefficiencies created by the current system of negotiated contracts for service outside of City limits. These inefficiencies include the following: routing decisions based upon intermunicipal contract negotiations rather than logical routing that best benefits the overall system, the potential for frequent unplanned route changes and difficulty in planning for future route extensions and capital investment. A regional transit authority would be relatively easy to implement since the contract operator employs all operating personnel. Prior to a transfer the City would need to negotiate with the new authority to transfer

ownership of transit system assets to the new authority and determine appropriate compensation for those assets, and to transfer the contract with the management company.

RACINE COUNTY SHERIFF'S DEPARTMENT

Introduction

The Racine County Sheriff's Department provides a wide variety of law enforcement services throughout Racine County. The sheriff is required to preserve the peace throughout the county, regardless of whether a local municipality has its own police force.

Although the Sheriff's Department is required to serve Countywide, many municipalities choose to maintain a local police department. Local police departments provide their own patrol, investigators, and dispatch services, only relying on the Sheriff's Department as backup. Every municipality is required to pay for sheriff services through county property taxes, regardless of the extent to which they actually use such services. This raises equity issues. For example, do those municipalities that maintain their own police force subsidize those that don't, and are they receiving any benefit from the Sheriff's department? Ruekert/Mielke conducted a study to examine these equity issues as they pertain to the Sheriff's Department services provided in the City of Racine. The study was presented in a report titled "An Analysis of Racine County Sheriff's Department Services Benefiting the City of Racine" and is included as Appendix 6.

Allocation of Costs for Sheriff's Department Activities and Services

Due to the size and diversity of the County's population, disparities in crime rates, and the presence of Lake Michigan, the Racine County Sheriff's Department offers many specialized investigative, crime prevention, safety promotion and educational services. For the most part, the Sheriff's Department offers its services countywide. However, the targeted area for specific programs or services may be a smaller portion of the County. The target areas depend on the need for a given service and the presence and extent of local law enforcement activities.

The Sheriff's Department identified fourteen categories of programs and services that it offers. Since the Department serves the entire county regardless of municipal boundaries, it does not have detailed information tracking the activity of personnel by location and duration of calls. Therefore, Department personnel working in each program developed a reasonable estimate based on their experience, as to the extent which the City of Racine benefits from their services. The benefit received by the City was expressed as a percentage of the time or effort expended in providing each of the programs or services.

To develop an estimate of the cost of Sheriff's Department services that benefit the City of Racine, it was assumed that the share of costs allocated to the City for each type of service was equal to the estimated percentage share of benefits of the service received by the City. Conservative estimates as to the maximum amount of costs that could be allocated to the City of Racine were prepared. An estimate of the percentage of the service that benefits the City of Racine, along with the 1998 net expenditures for each service, is summarized in Table 16. The total Sheriff's Department net expenditures for 1998 were approximately \$14.2 million. Based on the estimate of the benefits received by the City, the cost of services provided to the City totaled approximately \$5.8 million, or 41% of the Department's net expenditures.

City of Racine Contribution to the Racine County Sheriff's Department

The City of Racine contributes to the operation of the Sheriff's Department through county property taxes paid by City residents. The share of the Department's expenditures paid for by the City is approximately equal to the City's share of the total equalized property value in the

County. Property taxes collected in 1998 were based on 1997 equalized property value. In 1997, property in the City of Racine made up 32% of the equalized value of all property in Racine County. Thus, Racine's contribution to the Sheriff's Department net expenditures in 1998 was 32% of \$14.2 million, or about \$4.5 million.

Conclusion

No action regarding alternative funding arrangements for Sheriff's Department services is recommended at this time. Based upon the nature of the services provided and the data available, it may be concluded that there is no measurable inequity in terms of the City receiving less Sheriff's Department services than it pays for through county property taxes.

FISCAL IMPACTS OF JURISDICTIONAL HIGHWAY TRANSFERS

Introduction

In 1997, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) published a report entitled A Regional Transportation System Plan for Southeastern Wisconsin: 2020. This report analyzed the state, county and local highway networks of counties in Southeastern Wisconsin. Recommendations were made regarding functional improvements and jurisdictional changes for certain segments of the system. The recommended jurisdictional transfers include some transfers of local or county highways to State jurisdiction, as well as transfers of highways between county and local units of government.

The recommended changes in jurisdictional responsibility for highways may involve significant changes in fiscal responsibility for the municipalities involved. Although a region or a county may benefit overall by implementing the plan, fiscal costs and benefits are likely to be distributed unevenly among individual municipalities. A report by Ruekert/Mielke examined the fiscal impacts on county and local governmental units of making the recommended jurisdictional transfers for highways located in Eastern Racine County. This report is titled "Analysis of the Fiscal Impacts Associated with the Eastern Racine County Jurisdictional Highway Transfers Recommended in the Regional System Plan" and is included as Appendix 7.

Net Impacts of the Jurisdictional Transfers

The net changes in mileage, and the estimated fiscal impacts associated with the jurisdictional transfer recommendations in the aforementioned plan, are summarized in Table 17. As shown, Racine County and most of the municipalities in Eastern Racine County would receive a net fiscal benefit from the proposed jurisdictional transfers. The City of Racine, transferring the most miles of street and road to other levels of government, would save approximately \$428,000 per year. The towns of Caledonia and Raymond would also receive significant fiscal benefits of \$143,000 and \$126,000, respectively, from the transfers. Racine County and the Town of Yorkville would receive benefits of \$118,000 per year and \$6,600 per year respectively. The Town of Mount Pleasant would experience an increase of approximately \$49,000 in its annual highway expenditures.

Altogether, the county and local units of government would have jurisdictional responsibilities for 12.49 fewer miles of streets and roads following the transfers. These 12.49 miles represent the total miles of roads that would be transferred to the State of Wisconsin from Racine County and the City of Racine. All other recommended transfers would shift the distribution of fiscal responsibility between units of government within Racine County. The total net savings to Racine County and local units of government in eastern Racine County would be approximately \$766,900 per year if all recommended transfers were implemented.

Conclusion and Recommendation

It is recommended that Racine County and the municipalities in Eastern Racine County consider implementation of the transfers stated in the plan. These transfers would produce operational and fiscal benefits to both the county and the local units of government.

DISPATCH SERVICE

There are currently seven governmental entities in Racine County that provides some level of dispatch service. Of those, the Racine County Sheriff's Department currently provides dispatch service for police and fire/rescue departments throughout most of Racine County. The Department also answers 911 calls for several municipalities and all cellular 911 calls placed from anywhere in the County. The City of Racine, the City of Burlington, the Village of Sturtevant, the Town of Caledonia, the Town of Burlington and the Town of Mount Pleasant provide their own dispatch service at least, part time, but rely on the Sheriff's Department for backup service.

Therefore, it was the consensus of the municipalities in Eastern Racine County that a study be done to assess the feasibility of providing joint dispatch service countywide. This decision came about due to existing inefficiencies in the provision of dispatch service, and the potential for cost savings and greater efficiency. Ruekert/Mielke prepared a study that took existing total countywide dispatch personnel, and their operating and capital costs and compared them with the projected costs for a consolidated operation. The study pointed out the potential advantages and disadvantages that a centralized dispatch center might afford in terms of cost savings, service efficiency and overall public safety. The study was presented in a report titled "An Analysis of the Benefits of Consolidating Dispatch Services in Racine County" and is included as Appendix 8.

Overall, regardless of how much each municipality relies on County dispatch service, all municipalities contribute to the cost of this service. Payments are made in the form of County property taxes and each municipality contributes in proportion to its share of the total equalized value of property in Racine County. Based on year 2000 budgeted expenses, the seven current dispatch providers in Racine County spend approximately \$3.3 million per year for personnel and operating costs, including facility space (Table 18). In addition, these providers estimated that they would need to expend approximately \$5.1 million in the next 5 to 10 years to upgrade or replace dispatch equipment.

Personnel and operating costs for a consolidated center were projected based on the level of calls that the new center could expect to receive. Figure 1 shows the average number of calls by hour of the day, for each day of the week, for the current Sheriff's Department dispatch center, and the combined total of all other existing dispatch providers. The pattern of calls is very similar for the two groups, and it is expected that a consolidated center would receive approximately 356% of the current volume of calls received by the Sheriff's Department during any given shift. Assuming that the County Sheriff's Department would manage the consolidated center, it was estimated that the center would require 58 full time equivalent employees, ten less than the current level countywide. Total operating and personnel costs for the consolidated center were projected at \$3.0 million per year, a savings of \$349,000 over the current amount spent countywide for dispatch service.

In addition to the annual savings in operating costs, a consolidated center would result in savings in capital expenditures. Assuming that the consolidated center would be located in the City of Racine Police Department and would use existing City equipment, it would cost approximately \$4.2 million to add new consoles, upgrade the existing consoles, add new radio equipment, and upgrade the county microwave system. This would equate to \$939,000 in savings compared to

the total anticipated capital expenditures for the existing dispatch providers. For an additional \$211,000 emergency vehicles could be equipped with Automatic Vehicle Locators (AVLs) for even greater efficiency. The consolidated facility would be equipped with the latest technology allowing for improved levels of service.

Interviews with dispatch and law enforcement service providers identified several significant operational advantages in addition to the fiscal benefits. A consolidated center would reduce or eliminate the duplication of effort that now occurs when two dispatch agencies receive calls for the same incident. It would also allow the dispatcher to communicate with both county and local units and dispatch the closest unit, resulting in quicker response times. The location of a larger number of dispatchers in one center would provide greater staffing flexibility and training, better backup for multiple simultaneous calls, and allow for economies of scale in the distribution of calls. Overall, a consolidated dispatch center has the potential to provide for better and more consistent dispatch service throughout the County. This would happen as a result of improving communication between dispatchers and emergency personnel and making more efficient use of emergency personnel and resources.

It is anticipated that implementation of a consolidated center could involve some difficulties as local public safety agencies adjust to working with a larger consolidated dispatch provider. There may also be some negative perceptions about the increased role of the County Sheriff's Department if Sheriff's deputies are dispatched more often as a result of a nearest unit policy. Many of the difficulties can be overcome or reduced by carefully selecting the governance structure and fostering communication between the dispatch agency and the public safety agencies. Thorough training of dispatch personnel in the procedures of all the different public safety agencies and the acceptance of input from these agencies in the establishment of policies and procedures by the dispatch agency would improve the perception of responsiveness and service.

The cost savings combined with the opportunity for a higher level of service and public safety offer significant advantages over the existing dispatch service arrangements in the County. It is recommended that serious consideration be given to the option of providing a consolidated dispatch service to the residents of Racine County.

COUNTY HEALTH SERVICES

Racine County is currently the only county in the State of Wisconsin without a County Health Department. Each municipality in the County hires its own health officer or contracts with a health organization, such as a hospital, to provide health services. Some of the municipalities have found that the requirement for individual County Health Departments to provide for its own health services, makes it difficult to find and keep a local health officer or otherwise provide health services. An attempt to hire a joint health officer for more than one municipality has not been successful in addressing this problem. As of the date of this report, the heads of government group has not reached a consensus to pursue further study regarding the creation of a County Health Department.

MUNICIPAL BOUNDARY ADJUSTMENTS

Each participating municipality provided proposed boundary adjustments that would contribute to a more economical provision of municipal services and create more orderly geographical boundaries. Determining appropriate boundary adjustment is also a key step in achieving incorporation for Caledonia and Mount Pleasant, a major goal of this study. Three areas were identified for future boundary adjustment discussions: the area adjacent to the Town of Caledonia and the City of Racine (Exhibit 1); the area adjacent to the Town of Mount Pleasant and the City of Racine (Exhibit 2); and the area adjacent to the Village of Sturtevant and the

Town of Mount Pleasant (Exhibit 3). The affected municipalities are in general agreement with the proposed boundary adjustments shown on Exhibits 1 and 3. The proposed boundary adjustments shown on Exhibit 2 have not been agreed to by both of the affected municipalities.

Upon agreement as to the boundary adjustments to be made, the affected municipalities would enter into a cooperative boundary agreement under Wisconsin Statutes s.66.023 to establish the specific boundary changes. The municipalities would need to agree to a plan that would include the following elements:

- 1. The specific boundaries that would change and those that must remain the same;
- 2. Whether the boundary changes must occur or are just permitted to occur, and the conditions under which changes would take place;
- 3. A physical development plan for the territory covered by the agreement, including proposed public facilities, community centers and neighborhoods, and a comprehensive zoning plan;
- 4. A description of the services to be provided to the territory, the providers of such services and a schedule for extending services;
- 5. A description of any significant adverse environmental consequences and a plan for minimizing such consequences;
- 6. A statement addressing the provision of affordable housing;
- 7. A description of how the plan is compatible with state and federal laws, county shoreland zoning and municipal regulations;
- 8. The duration of the plan;
- 9. Any agreement to adopt a zoning ordinance for that portion of a town that is included in the territory covered by the plan.

After a public hearing, the participating municipalities would need to adopt a final plan by resolution and submit the plan to the Department of Administration for review and approval. The municipalities that would be affected by the proposed boundary changes shown in Exhibits 1–3 have not yet agreed to develop a cooperative plan.

In preparation for the incorporation of Caledonia and Mount Pleasant, it is recommended that the City of Racine, the Town of Mount Pleasant, the Town of Caledonia and the Village of Sturtevant continue to discuss the proposed boundary adjustments, and begin to discuss physical development plans and service provision for the areas that would be included in cooperative plans. Upon resolution of these issues, three cooperative plans should be drafted; one between the Town of Caledonia and the City of Racine, one between the Town of Mount Pleasant and the City of Racine, and one between the Town of Mount Pleasant and the Village of Sturtevant. Since all three of the agreements would include either the Town of Caledonia or the Town of Mount Pleasant, it is further recommended that these Towns complete the boundary agreements prior to incorporation.

METHODS FOR ATTAINING INTERGOVERNMENTAL COOPERATION

As described in the preceding sections of this report, the municipalities of Eastern Racine County are in the process of pursuing alternative strategies for achieving intergovernmental cooperation.

Issues of particular concern include the provision and funding of services, equalizing fiscal capacity, developing cooperative boundary agreements and achieving incorporation for Caledonia and Mount Pleasant. This report has addressed funding and provision responsibilities for a range of services, including wastewater treatment, library, zoo, museum, transit, streets and highways, Sheriff's Department services, and dispatch service. It has also highlighted the extent and magnitude of the disparities in fiscal capacity between the City of Racine and the surrounding municipalities. The final task of this study is to devise an overall strategy for dealing with this wide range of intergovernmental cooperation issues that achieves more equitable funding, enhanced service provision, reductions in fiscal capacity disparities and better overall cooperation between the municipalities of Racine County.

Funding and Provision of Services

It has been demonstrated that the City of Racine provides certain services and amenities used by the residents of other municipalities for which it is not adequately compensated. These services include the library, the zoo and the museum, which are funded primarily by the City of Racine but supply benefits to the surrounding municipalities. In addition, the City is planning a significant upgrade and expansion to its Wastewater Treatment Facility, much of which is needed to allow for future development in the surrounding municipalities. One alternative that has been considered as a means to provide more equitable funding arrangements, is the regionalization of the operation and funding of these services. It is recommended that the transit system and dispatch service be provided by a regional entity. These solutions, however, would not be easy to implement for the other services examined in this study. Another solution, and one that could be more easily implemented for WTF, library, zoo, and museum services, would be direct revenue sharing arrangements between municipalities that benefit from the services.

As stated earlier, it is recommended that the City of Racine enter into intermunicipal agreements with its sewer service customers for sharing the capital costs of the Wastewater Treatment System upgrade and expansion. In conjunction with these wastewater system agreements and as part of an overall regional cooperation plan, it is also recommended that the participating municipalities enter into revenue sharing agreements whereby each municipality would pay to the City of Racine an annual share of its tax revenues in consideration of the benefits received from the provision of other public services listed above. The agreements could be entered into under the provisions of Section 66.028 of the Wisconsin Statutes. The proposed arrangement would work as follows:

- 1. The City of Racine would continue to fund or provide the services and all existing operating structures would remain in place;
- 2. Each year an analysis would be performed to determine an appropriate allocation of the cost of providing services to municipalities that benefit from said services;
- 3. For each service, the net local funding requirement would be calculated by reducing the total budgeted expenditures by any funding received from the county or other non-local government sources;
- 4. The net local funding requirement would then be allocated to participating municipalities on the basis of their share of total population, equalized property value, or usage, depending on the service.

The revenues paid to the City would be structured so as to compensate the City to the extent that the City would not subsidize services to the surrounding municipalities. Table 19 shows an example of revenue sharing contributions from each municipality. The figures shown for the Zoo and the Wustum Museum are based on 1998 data, while the Library contributions are based

on 1998 circulation records and the 1999 Library budget. The actual contributions would be calculated annually based on information reported and certified by each participating municipality. The Towns of Raymond and Yorkville are not current customers of the Racine Wastewater Utility. However, at such time as these municipalities connect to the Racine Wastewater Treatment system, it is anticipated that they would enter into similar agreements with the City.

Fiscal Capacity

It has been demonstrated that large differences in fiscal capacity exist between the City of Racine and other municipalities in Eastern Racine County. The City has extended infrastructure improvements that have allowed for new high value development in the suburbs. This in turn has led to increasing fiscal capacity disparities between the City and the suburbs. The State of Wisconsin Shared Revenue program has only a small impact on equalizing fiscal capacity. Intermunicipal fiscal equalization programs that involve some form of tax base or tax revenue sharing can be used to further reduce fiscal capacity disparities between neighboring communities.

Tax base sharing involves allocating some portion of the property tax base of two or more municipalities into a common pool to which tax rates are applied based on an agreed upon formula. The taxes generated are then redistributed to the participating municipalities, based on an agreed upon formula, in order to equalize the fiscal capacities of the participating municipalities. Alternatively, tax revenue sharing programs redistribute the tax revenues generated by two or more municipalities from general property, sales, or income tax levies. Since tax base sharing and tax revenue sharing both result in the redistribution of revenues, the term tax revenue sharing is commonly used to refer to either type of program.

Ruekert/Mielke has researched fiscal equalization programs involving tax base sharing and tax revenue sharing in various jurisdictions throughout the United States and Canada. The research indicates that tax base sharing and tax revenue sharing programs are not very common in the U.S. This is due mainly to the difficulty in obtaining political consensus in favor of proposed programs. Each of the existing programs is specifically tailored to the local area's needs, relative fiscal capacities, local and state tax structures, and state statutes. The programs vary in complexity and include sharing of revenues from various tax sources including sales taxes, income taxes and property taxes.

A study was performed in order to develop a workable model for an intermunicipal revenue sharing program for Racine County. The study was presented in a report titled "A Property Tax Revenue Sharing Model for Eastern Racine County" and is included as Appendix 9. Of the different types of revenue sharing programs in use, property tax revenue sharing is the only one that is suitable for implementation in Eastern Racine County. The study determined that a property tax revenue sharing program for Eastern Racine County should have the following objectives:

- 1. Sharing of commercial and industrial tax base;
- 2. Transfers of revenues generally from high fiscal capacity communities to low fiscal capacity communities, abating inequities in fiscal capacity;
- 3. Reduction of disparities in tax rates;
- 4. Reduction of competition between neighboring communities for certain types of economic activity;

- 5. Reduction of annexation disputes;
- 6. Changes only in local tax rates and not the levels of service provided.

The formulas used for property tax revenue sharing programs in Minnesota and other jurisdictions may not be appropriate for the Racine area since the existing models can produce revenue distribution patterns that are inconsistent with the stated objectives. However, the review of other plans and the academic literature offer lessons and ideas that can be incorporated into developing a workable plan for Eastern Racine County.

A workable model for Eastern Racine County should incorporate the following concepts:

- 1. Contributions should be based on total commercial and industrial property values rather than increases in commercial and industrial property values;
- 2. The plan should be self-financing and net distributions should sum to zero;
- 3. Distributions to all communities should not be guaranteed to be positive;
- 4. The distribution formula should be based upon the difference between a municipality's fiscal capacity and the base fiscal capacity rather than a ratio of the two.

Ruekert/Mielke conducted extensive modeling of various revenue sharing formulas. After analysis, presentation and feedback from government officials, a revenue sharing plan was recommended. Under the proposed revenue sharing plan, each municipality would contribute 40% of its commercial and industrial tax base to the common pool. The tax base distributions would be 20% of the difference between a guaranteed residential tax base and the individual municipality's actual residential tax base. Under this formula, a municipality could have a negative tax base distribution if it has high residential property values.

The proposed model was run using 1998 data from the participating municipalities in Eastern Racine County. The revenue distribution results are summarized in Table 20. The results shown in Table 20 were calculated for illustration purposes only, using 1998 tax and property value information obtained from the Wisconsin Department of Revenue. The tax rates and property value figures that would be used to calculate actual revenue distributions would be based on information reported and certified by each participating municipality on an annual basis.

The model allows for sharing of commercial and industrial property tax base and produces revenue distributions from relatively high fiscal capacity municipalities to low fiscal capacity communities. A revenue distribution model can achieve net distribution results that are consistent with the objectives and may lessen competition between communities for attracting certain types of development. This could result in improved intergovernmental cooperation in the area.

The Wisconsin Shared Revenue Program is intended to address the issue of fiscal capacity disparities between Wisconsin municipalities. Through this program, the State of Wisconsin attempts to alleviate some of the disparities by redistributing state tax revenues in the form of aid payments to municipalities. An overview of this program is provided as Appendix 10. All municipalities receive at least a minimum payment per capita, but those with fiscal capacity below a level established by the program receive significantly larger payments. The size of the payment is proportionate to the extent that the municipality falls below the determined fiscal capacity level.

As explained earlier, an increase in fiscal capacity benefits a municipality because it allows the municipality to provide the same level of services with a lower tax rate. The shared revenue program has the same effect as an increase in fiscal capacity. Since the municipality receives part of its revenues from the State, the amount of revenue it needs to raise from local taxes decreases, therefore allowing a lower tax rate for a given level of services. The municipality can, in effect, spend the same amount at a lower tax rate, just as it could if its property values per capita increased. The effective fiscal capacity, after considering shared revenues, is the equivalent fiscal capacity that would provide the same total revenues as are received from the tax levy and the shared revenue aids.

An analysis was performed to determine the extent of fiscal capacity equalization brought about by the Wisconsin Shared Revenue Program. This analysis was presented in a report titled "An Analysis of the Fiscal Capacity Impacts of Revenue Sharing Programs for Municipalities in Eastern Racine County" and included as Appendix 11. The impact of the Shared Revenue Program can be observed by comparing the actual fiscal capacity with the calculated effective fiscal capacity. Table 21 displays the actual fiscal capacity and the effective fiscal capacity of each of the nine municipalities in Eastern Racine County for 1998. As shown, it can be said that the state shared revenue program does reduce disparities in fiscal capacity. However, even with state shared revenues, the average effective fiscal capacity of the surrounding communities is 156% of that of the City of Racine. This demonstrates that the shared revenues program does not completely equalize fiscal capacities, and that additional revenue sharing would be necessary to eliminate remaining fiscal disparities.

The revenue sharing program proposed for Eastern Racine County, combined with the Wisconsin Shared Revenue Program, would further reduce fiscal capacity disparities, as shown in Table 22. However, fiscal capacity disparities would still exist even after considering the combined impacts of both the state revenue sharing program and the proposed regional revenue sharing program.

Community Fiscal Impacts of the Proposed Cost-sharing and Revenue Sharing Agreements

The proposed cost sharing for the WTF expansion and upgrade and the proposed revenue sharing agreements would have significant fiscal impacts for the participating municipalities. Municipalities that are net contributors would need to raise additional revenues through increased charges and taxes to their sewer customers and residents. An estimate of the annual financial impact on sewer customers and residents for each municipality, utility district and sanitary district was computed as part of the intergovernmental relations study. The complete analysis can be found in a report titled "An Analysis of the Fiscal Impacts on Eastern Racine County Municipalities of the Proposed Cost Sharing for the Racine WTF Expansion and Upgrade and Intermunicipal Revenue Sharing." This report is included as Appendix 12.

As summarized in Table 8, each municipality, sanitary district or utility district that is a current or future customer of the Racine Sewer Utility will be responsible for a share of the capital cost of the WTF expansion and upgrade. Each of these entities will in turn recover the annual debt service payments for this project from their retail sewer customers through one of two cost recovery methods: sewer user charges and impact fees.

Since a portion of the WTF expansion is needed to provide excess capacity to accommodate future development, a proportionate share of the cost would be eligible for recovery through impact fees. Based on the capital cost allocation model, the share of capital costs related to providing excess capacity for future development was determined for each sewer service provider. The estimated impact fee per residential equivalent connection (REC) was then computed for the anticipated new future RECs for each entity, based on project wastewater flows from the WTF Facility Plan. One REC represents a typical single family residential household.

The remaining debt service, as well as the increase in WTF operation and maintenance costs, would be recovered through an increase in sewer user charges. Using the estimated current number of RECs, the impact per REC was calculated for each municipality, sanitary district or utility district.

The cost of participating in the revenue sharing agreements would be recovered through an increase in the local municipal property tax rate. The total tax rate increase attributable to tax base sharing and revenue sharing for library, zoo and museum services was calculated for each municipality, based on 1998 data.

Table 23 summarizes the estimated community impacts in terms of the increase in annual sewer user charges and property taxes on a typical single family residence in each community, as well as the sewer impact fee for new development.

Recommendations

It is recommended that Racine County, the City of Racine and participating municipalities consider the following actions with regards to the provision of services in Racine County:

- 1. Support the creation of a consolidated countywide dispatch center to replace the existing seven dispatch service providers;
- 2. Support the transfer of the Belle Urban Transit System to Racine County or a newly created regional authority;
- 3. Implement the jurisdictional transfers of streets and highways recommended in <u>A</u> Regional Transportation System Plan for Southeastern Wisconsin: 2020;
- 4. Pursue further study of the costs and benefits of creating a County Health Department.

In addition, it is recommended that the municipalities in Eastern Racine County that receive sewer service from the City of Racine enter into a series of intermunicipal agreements that will deal with the following issues:

- 1. Extension of sewer and water service to new development within the planned service areas;
- 2. Adoption of a new sewer service agreement and capital cost sharing arrangement for the Racine Wastewater Treatment Facility based on the method developed by Ruekert/Mielke, and used for the Brookfield Model (estimated community cost allocations are shown in Table 8);
- 3. Support for incorporation by entities that desire to incorporate;
- 4. Cooperative boundary agreements;
- 5. Revenue sharing to eliminate existing subsidies in the provision of library, museum and zoo facilities and services (estimated municipal contributions are shown in Table 19); and
- 6. Property tax revenue sharing agreements to reduce fiscal capacity disparities and allow for sharing of the benefits of new commercial and industrial development (estimated tax revenue sharing payments are shown in Table 20).

Table 24 summarizes the recommendations and the potential benefits of each.

Successful implementation of intermunicipal agreements addressing these issues is likely to reduce competition for certain types of development, eliminate disputes over territory and annexation, allow for the expansion and upgrade of the Wastewater Treatment Facility, all of which will accommodate future development and lead to an overall increase in regional cooperation.

Table 1
Eastern Racine County Municipalities
Fiscal Capacity in Terms of Equalized Property Values Per Capita, 1998

				Equalized Value
	Total Equalized		Equalized Value	per Capita in
Municipality	Value ⁽¹⁾	Population (2)	per Capita	Excess of Racine
V. North Bay	\$22,390,200	248	\$90,283	\$61,529
V. Wind Point	171,348,200	1,904	89,994	61,240
T. Yorkville	231,288,000	3,047	75,907	47,153
T. Raymond	225,155,000	3,348	67,251	38,496
T. Mt. Pleasant	1,340,313,000	22,248	60,244	31,490
V. Elmwood Park	30,039,600	524	57,327	28,573
V. Sturtevant	199,790,800	3,875	51,559	22,805
T. Caledonia	1,126,897,800	22,654	49,744	20,990
C. Racine	2,459,986,100	85,552	28,754	-

^{1.} Wisconsin Department of Revenue 1998 equalized values.

^{2.} Wisconsin Department of Administration 1998 population estimates. Sturtevant excludes prison population.

Table 2
Eastern Racine County Municipalities
Disparities in Equalized Value per Capita, 1990 and 1998

	Excess Equalized Value per Capita, Compared to Racine							
		Percent Change						
Municipality	1990	1998	1990-1998					
T. Caledonia	\$9,855	\$20,990	113%					
T. Mount Pleasant	18,081	31,490	74					
T. Raymond	17,332	38,496	122					
T. Yorkville	18,498	47,153	155					
V. Elmwood Park	22,820	28,573	25					
V. North Bay	55,919	61,529	10					
V. Sturtevant (1)	9,485	22,805	140					
V. Wind Point	54,809	61,240	12					
C. Racine	-	-	-					

1. Sturtevant excludes prison population.

Table 3
Eastern Racine County Municipalities
Municipal Property Tax Rates, 1998

Municipality	Property Tax Rate / \$1,000 ⁽¹⁾
V. Elmwood Park	\$4.41
T. Mt. Pleasant	7.06
V. Sturtevant	5.11
T. Caledonia	6.60
V. Wind Point	6.10
T. Raymond	2.53
T. Yorkville	2.36
V. North Bay	8.87
C. Racine	13.92

1. 1998 municipal full value tax rates (gross - before state property tax credit).

Source: Wisconsin DOR (total reported tax levy divided by full value.

Table 4
Eastern Racine County Municipalities
Growth In Manufacturing and Commercial Equalized Value, 1990-1998

	Total Manufacturing / Commercial Equalized Value (1)						
			Change,	Percent Change			
Municipality	1990 Dollars	1998 Dollars	1990-1998	1990-1998			
T. Caledonia	\$78,378,000	\$119,968,100	\$41,590,100	53%			
T. Mount Pleasant	167,148,800	318,261,900	151,113,100	90			
T. Raymond	12,868,100	35,829,700	22,961,600	178			
T. Yorkville	18,401,400	60,441,100	42,039,700	228			
V. Elmwood Park	1,435,500	1,421,400	-14,100	(1)			
V. North Bay	-	-	-	-			
V. Sturtevant	28,805,500	90,422,400	61,616,900	214			
V. Wind Point	6,539,800	8,405,300	1,865,500	29			
C. Racine	503,415,600	637,435,300	134,019,700	27			
Total	\$816,992,700	\$1,272,185,200	\$455,192,500	56%			

^{1.} Includes Tax Incremental District property values.

Table 5
Eastern Racine County Municipalities
Change in Manufacturing and Commercial Equalized Value per Capita, 1990-1998

	Manufacturing and Commercial Equalized Value per Capita						
Municipality	1990 Dollars	1998 Dollars	Change, 1990-1998				
T. Caledonia	\$3,732	\$5,296	\$1,563				
T. Mount Pleasant	8,322	14,305	5,983				
T. Raymond	3,968	10,702	6,734				
T. Yorkville	6,343	19,836	13,493				
V. Elmwood Park	2,688	2,713	24				
V. North Bay	-	-	-				
V. Sturtevant ⁽¹⁾	10,277	23,335	13,058				
V. Wind Point	3,369	4,415	1,045				
C. Racine	5,972	7,451	1,479				

^{1.} Sturtevant excludes prison population.

Table 6
Eastern Racine County Municipalities
Change in Residential Equalized Value per Capita, 1990-1998

	Residential Equalized Value per Capita							
Municipality	1990 Dollars	In Excess of Racine, 1990	1998 Dollars	In Excess of Racine, 1998	Percent Change in EV Gap, 1990-1998			
T. Caledonia	\$24,568	\$11,421	\$41,413	\$21,678	90%			
T. Mount Pleasant	26,284	13,138	40,807	21,072	60			
T. Raymond	23,023	9,876	40,304	20,569	108			
T. Yorkville	19,593	6,446	39,442	19,707	206			
V. Elmwood Park	39,956	26,809	53,731	33,997	27			
V. North Bay	76,691	63,545	90,243	70,508	11			
V. Sturtevant (1)	18,430	5,283	25,401	5,666	7			
V. Wind Point	71,040	57,894	84,145	64,411	11			
C. Racine	13,147	-	19,735	-	-			

1. Sturtevant excludes prison population.

Table 7
City of Racine Wastewater Treatment System
Community Capacity Allocations

	Average	Peak	Peak	Average	Average	Average	Average
	Day Flow	Day Flow	Hour Flow	Daily BOD	Daily TSS	Daily TKN	Daily P
Municipality	(mgd)	(mgd)	(mgd)	(lbs.)	(lbs.)	(lbs.)	(lbs.)
Racine (1)	17.06	90.59	109.12	15,303	19,639	2,253	442
Mount Pleasant (2)	10.18	45.77	82.93	8,363	10,732	1,231	241
Colonial Heights	0.03	0.18	0.22	27	35	4	1
Yorkville (3)	0.76	2.66	3.23	466	598	69	13
Raymond	0.15	0.54	0.66	96	123	14	3
Caledonia	1.93	8.11	10.35	2,108	2,705	310	61
Sturtevant	0.81	2.80	5.65	934	1,199	138	27
North Park Sanitary District (4)	2.64	8.99	13.46	3,151	4,043	464	91
Crestview Sanitary District	0.93	5.07	5.25	1,144	1,468	168	33
Total	34.49	164.71	230.87	31,592	40,542	4,651	912

^{1.} Includes the Villages of North Bay and Elmwood Park, excludes Colonial Heights.

^{2.} Colonial Heights shown separately.

^{3.} Yorkville allocation split 17% to Raymond, 83% to Yorkville per 11/17/99 memo from Earth Tech.

^{4.} Includes Wind Point.

Table 8
City of Racine Wastewater Treatment System
Summary of Community Capital Cost Allocations

Municipality	WTF Cost Allocation	Share	Interceptor System Cost Allocation	Share	Total Cost Allocation	Share
Racine (1)	\$21,080,729	31.5%	\$842,882	10.6%	\$21,923,612	29.3%
Mount Pleasant (2)	\$30,758,597	46.0%	\$2,700,022	34.0%	\$33,458,619	44.7%
Yorkville (3)	\$2,319,910	3.5%	\$206,430	2.6%	\$2,526,340	3.4%
Raymond	\$475,162	0.7%	\$42,281	0.5%	\$517,443	0.7%
Caledonia	\$3,944,013	5.9%	\$3,396,504	42.8%	\$7,340,517	9.8%
Sturtevant	\$1,339,158	2.0%	\$37,340	0.5%	\$1,376,498	1.8%
North Park (4)	\$4,801,233	7.2%	\$552,939	7.0%	\$5,354,172	7.2%
Crestview	\$2,200,434	3.3%	\$159,362	2.0%	\$2,359,795	3.2%
Total (5)	\$66,919,236	100.0%	\$7,937,760	100.0%	\$74,856,996	100.0%

- 1. Includes Villages of North Bay and Elmwood Park, excludes Colonial Heights.
- 2. Includes Colonial Heights.
- 3. Yorkville allocation split 17% to Raymond, 83% to Yorkville per 11/17/99 memo from Earth Tech.
- 4. Includes Wind Point.
- 5. Cost estimates from the Facilities Plan for the Racine Wastewater Utility (February 1998).

Table 9

Racine Public Library

Comparison of Revenue from Local Sources--Actual Funding vs. Funding Based on Use, 1995 - 1998

	1995			1996			1997		
	Actual	Use Based	Difference	Actual	Use Based	Difference	Actual	Use Based	Difference
City of Racine	\$1,696,422	\$1,275,405	\$421,017	\$1,833,105	\$1,381,493	\$451,612	\$1,844,153	\$1,424,125	\$420,028
County	\$448,773	\$869,790	-\$421,017	\$513,731	\$965,343	-\$451,612	\$588,472	\$1,008,500	-\$420,028
Total	\$2,145,195	\$2,145,195	\$0	\$2,346,836	\$2,346,836	\$0	\$2,432,625	\$2,432,625	\$0

	1998			Average		
	Actual	Use Based	Difference	Actual	Use Based	Difference
City of Racine	\$1,862,620	\$1,405,184	\$457,436	\$1,809,075	\$1,371,552	\$437,523
County	\$640,811	\$1,098,247	-\$457,436	\$547,947	\$985,470	-\$437,523
Total	\$2,503,431	\$2,503,431	\$0	\$2,357,022	\$2,357,022	\$0

Table 10

Racine Public Library

Calculation of Proposed Eastern Racine County Community Payments for Library Funding, 1998 Data

Municipality	1998 Circulation	% of Sewer Service Area Circulation	1998 Operating Shortfall Share	Capital Cost Share	Total Proposed Cost Allocation
T. Caledonia	171,104	45.9%	\$209,840	\$109,859	\$319,699
T. Mt. Pleasant	139,142	37.3%	\$170,642	\$89,337	\$259,980
T. Raymond	7,851	2.1%	\$9,628	\$5,041	\$14,669
T. Yorkville	4,473	1.2%	\$5,486	\$2,872	\$8,358
V. Elmwood Park	4,867	1.3%	\$5,969	\$3,125	\$9,094
V. North Bay	3,666	1.0%	\$4,496	\$2,354	\$6,850
V. Sturtevant	20,278	5.4%	\$24,869	\$13,020	\$37,888
V. Wind Point	21,613	5.8%	\$26,506	\$13,877	\$40,383
Total	372,994	100.0%	\$457,436	\$239,484	\$696,920

Table 11 Racine Zoological Gardens Funding from the City and County of Racine, 1998

Funding Contributions	Funding	Share
Direct Municipal Contributions		
City of Racine Funding	\$475,000	83%
Racine County Funding	\$100,000	17%
Total City/County Funding	\$575,000	100%
Property Tax Contributions		
Racine Share of County Funding (1)	\$30,375	30%
Other County Share	\$69,625	70%
Total County Funding	\$100,000	100%
Net Total Contributions		
Net City Funding	\$505,375	88%
Net County Funding	\$69,625	12%
Total City/County Funding	\$575,000	100%

^{1.} Contributions of Racine residents through County property taxes, based on Racine's share of total county equalized property values.

Table 12
Racine Zoological Gardens
Community Contributions Under the Eastern Racine County Funding Option

		Eastern Racine County Funding	
Community	Current Share (1)	Option (2)	Difference
T. Caledonia	\$13,914	\$106,088	\$92,174
T. Mt. Pleasant	\$16,549	\$126,180	\$109,631
T. Raymond	\$2,780	\$21,197	\$18,417
T. Yorkville	\$2,856	\$21,774	\$18,918
V. Elmwood Park	\$371	\$2,828	\$2,457
V. North Bay	\$276	\$2,107	\$1,831
V. Sturtevant	\$2,467	\$18,809	\$16,342
V. Wind Point	\$2,116	\$16,131	\$14,015
C. Racine	\$505,375	\$231,590	-\$273,785

- 1. Current plan with \$100,000 from County and \$475,000 from City of Racine.
- 2. Racine County continues to contribute \$100,000 per year and \$475,000 is paid by Eastern Racine County communities.

Table 13
Charles A. Wustum Museum of Fine Arts
Community Contributions Under the Eastern Racine County Funding Option

Community	Current Contribution	Eastern Racine County Funding Option (1)	Difference
T. Caledonia	\$0	\$38,417	\$38,417
T. Mt. Pleasant	\$0	\$45,693	\$45,693
T. Raymond	\$0	\$7,676	\$7,676
T. Yorkville	\$0	\$7,885	\$7,885
V. Elmwood Park	\$0	\$1,024	\$1,024
V. North Bay	\$0	\$763	\$763
V. Sturtevant	\$0	\$6,811	\$6,811
V. Wind Point	\$0	\$5,841	\$5,841
C. Racine	\$197,974	\$83,864	-\$114,110
Total (2)	\$197,974	\$197,974	\$0

- 1. Eastern Racine County communities share the entire operating subsidy according to total equalized property value.
- 2. Does not include the \$147,808 estimated annual rental value of the Museum property owned by the City.

Table 14
Charles A. Wustum Museum of Fine Arts
Proposed Community Contributions for Capital Costs

			Annual Capital
	Total EV 1998	Share	Charge
T. Caledonia	\$1,126,897,800	19.4%	\$7,863
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$9,353
T. Raymond	\$225,155,000	3.9%	\$1,571
T. Yorkville	\$231,288,000	4.0%	\$1,614
V. Elmwood Park	\$30,039,600	0.5%	\$210
V. North Bay	\$22,390,200	0.4%	\$156
V. Sturtevant	\$199,790,800	3.4%	\$1,394
V. Wind Point	\$171,348,200	3.0%	\$1,196
Subtotal	\$3,347,222,600	57.6%	\$23,357
C. Racine	\$2,459,986,100	42.4%	\$17,166
Total	\$5,807,208,700	100%	\$40,523
Total Capital Costs (1)	\$505,000		
Annual Amortization of Balar	\$40,523		

Notes:

- 1. Major capital improvements 1987-1998.
- 2. Amortized over next 20 years.

Table 15 Belle Urban Transit System Calculation of Unrecovered Cost for Route 20 Service

Route 20 Annual Mileage by Community						
Town of Mt. Pleasant	19,625					
Village of Sturtevant	3,400					
Other Municipalities	6,700					
Subtotal	29,725					
City of Racine	12,675					
Total	42,400					
1999 Budgeted Cost	per Mile					
System Expense / Mile	\$4.26					
System Revenue / Mile	(\$0.85)					
Federal & State Aid / Mile	(\$2.56)					
Net Local Cost / Mile	\$0.85					
Total Cost for Route 2	0 Service					
Annual miles	42,400					
Cost / Mile	\$0.85					
Annual Cost	\$36,040					
Unrecovered Route 20 Cost						
Annual miles	29,725					
Cost / Mile	\$0.85					
Annual Cost	\$25,266					

Table 16
Racine County Sheriff's Department
1998 Net Expenditures by Activity and the Benefit to the City of Racine

		City of Racine	City of Racine
Activity	Net Expenditures	Percentage Share	Share
Sheriff's Patrol	\$4,167,269	5%	\$208,363
Detective Bureau	1,057,811	13	137,515
Special Enforcement Unit	397,761	86	342,074
Courts & Conveyance	1,200,342	75	900,257
Civil Process	155,080	80	124,064
Warrants	210,001	90	189,001
Dispatch	832,853	8	66,628
D.A.R.E./Deputy Friendly	138,785	10	13,879
Records Bureau	280,562	15	42,084
Welfare Fraud	173,474	85	147,453
Water Patrol	345,859	40	138,344
Child Support	23,816	90	21,434
Jail	4,940,193	66	3,260,527
Metro Drug Unit	290,703	70	203,492
Total	\$14,214,509	41%	\$5,795,115

Table 17
Summary of the Estimated Fiscal Impact on Racine County and Local Units of Government in Eastern Racine County of Implementing the Transfers Recommended in the Regional Transportation System Plan

Unit of Government:	Net Increase / (Decrease) in Miles	Net Increase / (Decrease) in Annual Cost
City of Racine	-6.67	(\$427,700)
Villages Elmwood Park North Bay Sturtevant Wind Point	0.00 0.00 0.00 0.00	0 0 0 0
Towns Caledonia Mount Pleasant Raymond Yorkville	0.40 3.95 1.14 -0.49	(143,000) 48,500 (126,200) (6,600)
Racine County	-10.82	(118,100)
Net	-12.49	(\$773,100)

Table 18
Racine County Dispatch Service Providers
Summary of Service Costs, 2000 Budget

	Annual Personnel	Annual Personnel Annual Operating	
Dispatch Center	Costs	Costs	Costs
Town of Burlington	\$10,359	\$9,400	\$19,759
Town of Caledonia	\$166,092	\$20,812	\$186,904
Town of Mt. Pleasant	\$300,486	\$29,180	\$329,666
Village of Sturtevant	\$153,260	\$55,931	\$209,191
City of Burlington	\$166,333	\$25,040	\$191,373
City of Racine	\$1,328,997	\$69,300	\$1,398,297
Racine County	\$920,279	\$77,142	\$997,421
Total	\$3,045,806	\$286,805	\$3,332,611

Figure 1
Weekly Dispatch Call Activity, 1999
(By Hour and Day)

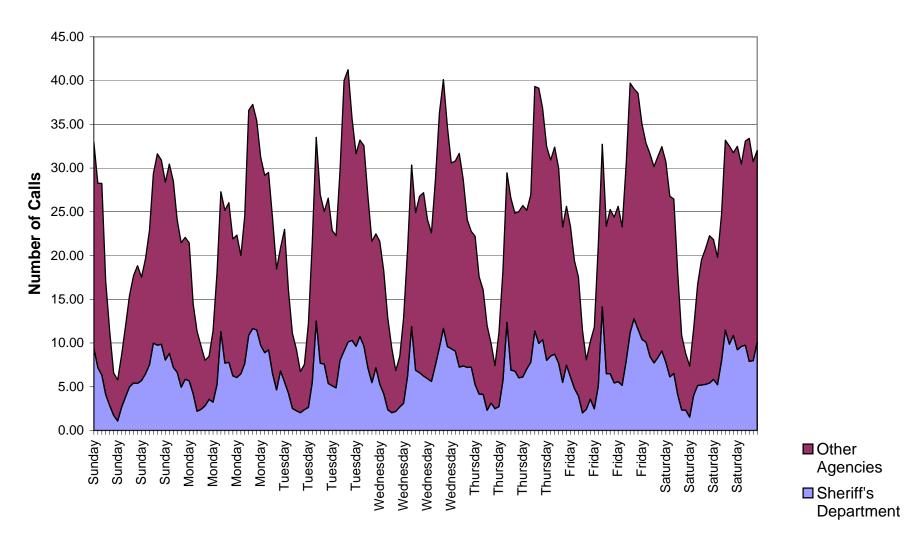


Table 19
Summary of Revenue Sharing for the Provision of Services by the City of Racine
Sample Contributions Using 1998 Data ⁽³⁾

	Total Annual Contribution (1)							
Municipality	Library (2) (3)	Library ^{(2) (3)} Zoo		Total				
Town of Caledonia	\$333,817	\$92,174	\$38,417	\$464,409				
Town of Mount Pleasant	\$271,461	\$109,631	\$45,693	\$426,784				
Town of Raymond	\$15,317	\$18,417	\$7,676	\$41,409				
Town of Yorkville	\$8,727	\$18,918	\$7,885	\$35,530				
Village of Elmwood Park	\$9,495	\$2,457	\$1,024	\$12,976				
Village of North Bay	\$7,152	\$1,831	\$763	\$9,747				
Village of Sturtevant	\$39,562	\$16,342	\$6,811	\$62,715				
Village of Wind Point	\$42,166	\$14,015	\$5,841	\$62,023				
Total	\$727,697	\$273,786	\$114,110	\$1,115,593				

- 1. It is anticipated that the Towns of Raymond and Yorkville would connect to the City sewerage system in the future, and would become participants in revenue sharing agreements at that time.
- 2. Includes capital costs.
- 3. The contributions for library service were calculated based on 1998 circulation and the 1999 library budget to demonstrate how revenue sharing would actually be computed. Therefore, these figures differ from the 1998 funding shortfall calculated in Appendix 2 "An Intermunicipal Cost Sharing Analysis for Services Provided by the Racine Public Library."

Table 20 Proposed Tax Base Sharing Model for Eastern Racine County Sample Net Revenue Distributions Using 1998 Data

	Town of Caledonia	Town of Mount Pleasant	Town of Raymond	Town of Yorkville	Village of Elmwood Park	Village of North Bay	Village of Sturtevant	Village of Wind Point	City of Racine	Total
Net Distribution (1)	-\$334,063	-\$1,054,516	-\$85,581	-\$63,216	-\$7,674	-\$22,490	-\$137,116	-\$130,822	\$1,835,478	\$0

^{1.} Based upon the proposed model using 1998 data. Each municipality contributes 40% of its commercial and industrial tax base to a common pool. Tax base distributions are equal to 20% of the difference between the guaranteed residential tax base and the municipality's actual residential tax base. All net distributions sum to zero.

Table 21
Eastern Racine County Municipalities
Fiscal Capacity vs. Effective Fiscal Capacity After State Revenue Sharing, 1998

				Aid Adjusted
		E.V. / Capita		E.V. / Capita
	Equalized Value per	Compared to	Aid Adjusted	Compared to
Municipality	Capita	Racine	E.V./Capita (1)	Racine
T. Caledonia	\$49,744	173%	\$58,837	114%
T. Mt. Pleasant	\$60,244	210%	\$65,736	127%
T. Raymond	\$75,907	264%	\$87,492	169%
T. Yorkville	\$67,251	234%	\$78,033	151%
V. Elmwood Park	\$57,327	199%	\$66,828	129%
V. North Bay	\$90,283	314%	\$98,866	191%
V. Sturtevant	\$51,559	179%	\$103,808	200%
V. Wind Point	\$89,994	313%	\$96,896	187%
Average	\$57,862	201%	\$68,620	132%
C. Racine	\$28,754	100%	\$51,803	100%

^{1.} The Aid Adjusted Equalized Value per Capita is the equivalent equalized value per capita that would be necessary to generate the same revenues as the sum of the municipality's local tax levy plus the aid received from the Shared Revenues Program without increasing the municipal tax rate.

Table 22
Eastern Racine County Municipalities
Fiscal Capacity v.s Effective Fiscal Capacity after State Revenue Sharing and Proposed Tax Base Sharing

	Equalized Value	E.V./Capita Compared to	State Aid Adjusted	Aid Adjusted E.V./Capita Compared to	Effective E.V./Capita Adjusted for State Aid and Tax Base	State Aid and Tax Base Sharing Adjusted E.V./Capita
Municipality	per Capita	Racine	E.V./Capita	Racine	Sharing	Compared to Racine
T. Caledonia	\$49,744	173%	\$58,837	114%	\$56,604	106%
T. Mt. Pleasant	\$60,244	210%	\$65,736	127%	\$59,022	111%
T. Raymond	\$75,907	264%	\$87,492	169%	\$78,709	148%
T. Yorkville	\$67,251	234%	\$78,033	151%	\$67,924	127%
V. Elmwood Park	\$57,327	199%	\$66,828	129%	\$63,508	119%
V. North Bay	\$90,283	314%	\$98,866	191%	\$88,638	166%
V. Sturtevant	\$51,559	179%	\$103,808	200%	\$96,878	182%
V. Wind Point	\$89,994	313%	\$96,896	187%	\$85,630	161%
Average	\$57,862	201%	\$68,620	132%	\$63,206	118%
C. Racine	\$28,754	100%	\$51,803	100%	\$53,344	100%

Table 23

Community Impacts of Cost Sharing for the Racine WTF Expansion and Revenue Sharing ⁽¹⁾

Annual Financial Impact on a Single Family Residence and Impact Fee for Future Development

	То	own of Caledo	onia							Village of Wind Point	
	Caledonia U. D.	North Park S.D.	Crestview S. D.	Town of Mt. Pleasant	Town of Raymond	Town of Yorkville	Village of Elmwood Park	Village of North Bay	Village of Sturtevant	North Park S.D.	City of Racine
Existing Single Family Home											
Annual Increase in Sewer Charges	\$56.06	\$34.04	\$34.39	\$39.77	\$32.88	\$32.88	\$33.37	\$33.37	\$32.88	\$34.04	\$33.37
Annual Property Tax Increase (2)	\$70.00	\$70.00	\$70.00	\$113.00	\$46.00	\$52.00	\$71.00	\$148.00	\$52.00	\$114.00	\$0.00
Total Annual Increase Total Monthly Increase	\$126.06 \$10.51	\$104.04 \$8.67	\$104.39 \$8.70	\$152.77 \$12.73	\$78.88 \$6.57	\$84.88 \$7.07	\$104.37 \$8.70	\$181.37 \$15.11	\$84.88 \$7.07	\$148.04 \$12.34	\$33.37 \$2.78
Future Development											
RCA Charge/Impact Fee Per REC	\$3,270	\$1,726	\$1,816	\$2,368	\$1,668	\$1,668	\$1,804	\$1,804	\$1,668	\$1,726	\$1,804

^{1.} Based upon 1998 data and original Facility Plan cost estimates.

^{2.} Annual property tax increase for \$100,000 home.

Table 24
Racine Intergovernmental Relations Study
Summary of Issues and Recommendations

ISSUE	RECOMMENDATION	BENEFITS
Fiscal capacity inequities	Revenue sharing agreements	More fiscal capacity equalization, reduction in competition for development and border disputes, increased intergovernmental cooperation
Wastewater Treatment Facility expansion and upgrade, extension of new sewer service	Sewer service agreement based upon R M cost of service capital cost allocation	Continued provision of quality wastewater treatment services for existing customers and future development, fair allocation of capital costs
Provision of public services by the City of Racine (Library, Zoo, Museum, Transit)	Revenue sharing agreement to reimburse the City of Racine for services provided	Fair sharing of the cost of providing public services that benefit multiple municipalities
Fiscal impacts of implementing jurisdictional highway transfers proposed in "A Regional Transportation System Plan for Southeastern Wisconsin: 2020" SEWRPC	Implementation of jurisdictional highway transfers outlined in the SEWRPC report for municipalities in Eastern Racine County	Significant annual cost savings for Racine County and municipalities in Eastern Racine County
Boundary disputes	Meetings with municipalities resulting in intermunicipal agreements under Wis.Stats. 66.023	Elimination of disputes over annexation and incorporation, support for incorporation for entities that desire to incorporate
Incorporation of Caledonia and Mount Pleasant	Support incorporation as part of an overall regional cooperation agreement	Ends any border disputes between parties and allows communities to properly plan their future
Provision of dispatch service	Implement countywide consolidated dispatch service plan	Operating and capital cost savings, improved level of service and increased operating efficiences

APPENDIX 1

A COST OF SERVICE BASED CAPITAL COST ALLOCATION MODEL FOR EXPANSION AND UPGRADE OF THE RACINE WASTEWATER TREATMENT FACILITY

A COST OF SERVICE BASED CAPITAL COST ALLOCATION MODEL FOR EXPANSION AND UPGRADE OF THE RACINE WASTEWATER TREATMENT FACILITY

<u>Introduction</u>

The Racine Wastewater Utility operates a Wastewater Treatment Facility, interceptor system and collector system that collect and treat sanitary sewerage waste from the City of Racine and a number of neighboring communities. Current municipal customers of the Utility include the City of Racine, the Town of Mount Pleasant, the Town of Yorkville, the Town of Caledonia, the Village of Sturtevant, the Village of North Bay, the Village of Elmwood Park, the North Park Sanitary District, and the Crestview Sanitary District. The Utility also serves the Colonial Heights Sanitary District through its connection to the Mount Pleasant Sanitary District.

From 1977 to 1996, the Utility provided service according to a contract with each of the municipalities it served. This contract provided for the recovery of operation and maintenance costs, depreciation and a rate of return on capital investments made by the Utility. Each municipality paid for a percentage share of the O&M and capital costs based on its share of total flow treated by the Utility. Since the City of Racine accounts for approximately 65% of the current flow, this meant that City ratepayers carried a large share of the capital costs.

At the time that the previous contract expired, the Utility was in the process of facility planning for approximately \$75 million in upgrades and expansions to the treatment facility and interceptor system. That facility plan has since been submitted to the Wisconsin Department of Natural Resources for approval. A portion of the planned upgrades will be necessary to improve the function of the treatment facility and remedy existing deficiencies in treatment capacity. However, a majority of the improvements will be needed to accommodate increasing flows generated by new development in the future. Most of this new development will occur outside of the City of Racine, so that flows from the City of Racine will account for less than 45% of the total sewage treated by 2030.

If the Utility were to continue recovering capital costs under the current methodology, City ratepayers would initially carry the majority of the costs of the facility improvements. As new development occurred in the surrounding municipalities, the share of capital costs paid for by City residents would gradually decrease, until the expanded treatment facility reaches full capacity. Since the majority of new improvements would be put in place to treat increased flows from surrounding municipalities, City ratepayers would pay for more than the share of improvements needed to treat their waste.

The Racine Wastewater Utility hired Ruekert/Mielke to develop a new method for recovering capital costs associated with the proposed treatment facility and interceptor system improvements. The proposed method described below is based on the model used for the Fox River Water Pollution Control Center, which is a regional facility that is managed by the City of Brookfield (Brookfield Model).

The Brookfield Model

In 1996, the City of Brookfield was faced with approximately \$47 million in expansion and upgrade costs for the Fox River Water Pollution Control Center (FRWPCC) that it owns, operates and maintains. The FRWPCC serves the City of Brookfield, City of New Berlin, Village of Menomonee Falls, Village of Pewaukee, Town of Brookfield Sanitary District No. 4, Town of Pewaukee Sanitary District Number 3 and the Lake Pewaukee Sanitary District. Ruekert/Mielke developed a cost-sharing model based upon a cost of service study that involved the evaluation and allocation of all wastewater treatment plant components and related costs according to projected use by each community.

The cost-sharing arrangements recommended by the model were implemented through a series of intermunicipal agreements among the seven parties served by the FRWPCC. The agreements designate certain rights and responsibilities for all parties. The main right assigned to all parties is an ownership share in treatment plant capacity. In return, each party is responsible to pay its allocated share of capital cost as determined under the cost of service model. In addition, each party pays operation, maintenance and replacement costs in proportion to its quarterly metered flow.

The City of Brookfield served as the designated project management agency for the construction of the facility improvements and continues to provide day-to-day management for the operation and maintenance of the wastewater treatment facility. A summary of rights and responsibilities for all parties is included as Appendix A.

The cost sharing arrangement resulted in a fair allocation of capital costs to all parties served. Rather than the Utility investing in infrastructure up front and then recovering its investment through a rate of return in its user rates, each sewer service area community purchased a portion of the treatment facility capacity. Each community has the right to discharge a certain amount of waste to the treatment facility and assumes a proportionate share of the infrastructure costs associated with that amount of treatment capacity.

Under this model, the extraterritorial customers of the Utility may discharge waste up to their capacity allocation immediately, or gradually increase the amount of waste treated over time. Either way, the ratepayers of the City of Brookfield, which owns the treatment facility, pay only for the share of the infrastructure needed to treat the waste that will come from the City, and do not carry the cost of capacity intended to serve future development in other communities.

Current and Future Wastewater Flows

The Facility Plan for the Racine Wastewater Treatment Facility identified the current and future expected volumes of waste from each municipal customer. The measure of the volume of flow is defined in terms of the amount received over a certain period of time. There are generally three standard measures of flow used for designing wastewater treatment facilities: average daily flow, maximum or peak daily flow, and peak hourly flow. The three measures of flow are generally expressed in terms of millions of gallons per day (MGD). Average daily flow is defined as the total volume of waste discharged in a year divided by 365 days. Maximum or peak daily flow is the maximum volume of waste received at the facility in any 24-hour period. Peak hourly flow is the maximum volume of waste received in any one hour, multiplied by 24 hours. The treatment facility must be designed to handle all three levels of wastewater flow, so each community's capacity allocation can therefore also be defined in terms of average daily flow, maximum daily flow and peak hourly flow.

Existing and projected flow data for each municipality are summarized in Table 1. The first two columns in each section show the existing volume of flow for each community, in terms of million gallons per day, and the share of the total waste treated at the facility. Columns three and four show the expected flows and percentage shares for each community in 2020. The expected flows and percentage shares in the year 2030 are displayed in columns five and six. In column seven, the increase in 2020 flow over the existing flow is calculated, with column eight showing each community's share of the overall increase in flow. Finally, columns nine and ten calculate the increase in 2030 flow over the existing flow and each community's share of the increase.

The amount of capacity to be purchased by each municipal customer is the 2020 average daily flow, maximum daily flow and peak hourly flow projected for that community by the Facility Plan.

8036001.100

Community Flow Shares

The existing and projected future flow shares were used as the basis for allocating the costs of each component of the system improvements. Each component of the treatment facility upgrade was designed for a specific purpose. Some of the improvements will be needed to replace equipment that is obsolete and implement new and improved treatment technology. Some components will expand the facility in order to treat existing average daily flows, while other components are needed to handle the high volumes of waste received at the facility on a peak day. Many components are needed to expand the facility capacity in anticipation of future growth and development in the service area.

The cost for each component of the facility improvements was therefore allocated based on the purpose for which the improvement is required. For example, if a component is needed to expand facility capacity for additional average daily flows by 2020, over and above the capacity needed to treat existing average daily flows, the cost of that component would be shared according to the percentage shares of 2020 increased average daily flow.

Table 2 displays the percentage share of flow by community for each category of flow. The community shares for each category of flow were used as a method for allocating the components of the treatment facility and interceptor improvements as follows:

<u>Existing Peak Day Flow</u>. Any share of a facility improvement needed to remedy an existing deficiency in capacity to treat existing peak day flow was allocated on the basis of shares of existing peak day flow.

<u>Design 2020 Peak Day Flow.</u> Improvements to upgrade treatment facilities or replace technologically or functionally obsolete equipment, and designed to treat peak day flows through 2020, were allocated on the basis of community shares of projected 2020 peak day flow.

<u>2020 Increased Peak Day Flow</u>. Improvements needed to expand facility or interceptor capacity to handle increases in peak day flow through 2020 were allocated on the basis of increases in peak day flow between existing and 2020.

<u>Existing Average Day Flow</u>. Improvements needed to expand facility capacity to remedy deficiencies in treating existing average day flow were allocated based on community shares of existing average day flow.

<u>Design 2020 Average Day Flow.</u> Components needed to improve the treatment of average day flow or replace technologically or functionally obsolete equipment, and designed to handle 2020 average day flows, were allocated based on the community shares of 2020 average day flow.

<u>2020 Increased Average Day Flow</u>. Components needed to expand facility capacity for future increases in average day flow were allocated according to the community shares of increases in 2020 average day flow over existing average day flow.

<u>2030 Peak Day Flow</u>. Improvements to upgrade the facility for treatment of peak day flow or replace technologically or functionally obsolete equipment, and designed to handle 2030 peak day flows, were allocated based on community shares of 2030 peak day flow.

<u>2030 Increased Peak Day Flow</u>. Improvements needed to expand facility capacity to treat peak day flow through 2030 were allocated according to community shares of the projected increase in peak day flow through 2030.

<u>Existing Peak Hour Flow</u>. Improvements needed to expand facility capacity to treat existing peak hour flow were allocated by community shares of existing peak hour flow.

<u>Design 2020 Peak Hour Flow.</u> Improvements needed to upgrade treatment facilities or replace technologically or functionally obsolete equipment, and designed to handle 2020 peak hour flows, were allocated according to community shares of 2020 peak hour flow.

<u>2020 Increased Peak Hour Flow</u>. Improvements needed to expand peak hour capacity to handle projected peak hour flow through 2020 were allocated based on community shares of increases in peak hour flow through 2020.

<u>2030 Peak Hour Flow</u>. Improvements needed to upgrade treatment facilities or replace technologically or functionally obsolete equipment, and designed to handle 2030 peak hour flows, were allocated according to community shares of 2030 peak hour flow.

<u>2030 Increased Peak Hour Flow</u>. Improvements needed to increase peak hour capacity to treat peak hour flows through 2030 were allocated on the basis of community shares of increases in peak hour flow through 2030.

The letter next to each methodology in Table 2 was used as a code for indicating the methodology used to allocate the cost of specific improvements on the detailed cost allocation worksheets.

Planned Wastewater Treatment Facility Expansion and Upgrade

The Facility Plan recommended numerous improvements to both the Wastewater Treatment Facility and the Interceptor System, as well as improvements to local collector and interceptor systems to reduce inflow. Table 3 shows the estimated costs by component for both the Treatment Facility and the Interceptor System. Total project costs, including contingency, engineering, legal and administrative costs are expected to reach almost \$81 million.

A complete description of the existing wastewater treatment system and the necessary improvements can be found in the Facility Plan. In general, the capacity of the treatment facility and the interceptor system are not sufficient to handle either existing or future flows and loadings, some of the equipment is nearing the end of its useful life, and treatment processes need to be updated to improve the quality of wastewater effluent and reduce the cost of treatment. A major issue is the fact that the hydraulic capacity of the facility falls short of the flows received during peak storm events. The existing capacity of the facility is 70 million gallons per day (MGD). Flows in excess of this volume are chlorinated and diverted to the storm water clarifier. The storm water clarifier has a capacity of 80 MGD and is designed to act as a storage basin, storing wastewater flows during a 7-year storm event. However, the peak hour flows occasionally exceed the combined capacity of both the facility and the storm water As can be seen from Table 1, the existing peak hour flows to the facility are approximately 174.45 MGD while the combined facility and storm water clarifier capacity is only 150 MGD. When this capacity is exceeded, overflow from the storm water clarifier is discharged with the secondary effluent and bypasses the treatment facility. Thus, the treatment facility and storm water clarifier need to be expanded to treat both existing and future flows.

Table 4 shows a breakdown of the amount of treatment facility and storm water clarifier capacity needed to remedy the existing deficiency versus capacity needed for future growth. Column 1 displays the current capacity of the facility and clarifier, the existing peak hour flow and the total existing capacity deficiency. Column 2 shows the percentage of total capacity provided by the treatment facility and the clarifier. The current split of 47% facility capacity, 53% clarifier capacity produces effluent that consistently meets all effluent limits during peak flow events

when the storm water clarifier is in use. Therefore, improvements were designed to maintain this capacity mix between treatment facility and clarifier. Column 3 calculates the allocation of the capacity deficiency between treatment facility and clarifier according to the 47/53 split, and Column 4 shows the capacity of treatment facility and clarifier that would be needed to handle the existing peak hour flows.

The next group of columns calculates the allocation of planned capacity expansion between current deficiency and future increased flows. Column 5 shows the 2020 design capacity of the treatment facility and clarifier. As indicated in Column 6, the design maintains the same ratio of treatment facility capacity to clarifier capacity. Column 7 calculates the total additional capacity that will be provided by the facility improvements. Column 8 shows the capacity deficiency that was calculated in Column 3 for the WTF and clarifier. In Column 9, the capacity needed for increased flow is the total additional capacity less the capacity needed to remedy the existing deficiency. Columns 10 and 11 calculate the percentage share of capacity needed to make up the existing deficiency versus that needed to accommodate increased flows. As indicated here, 30.2% of the planned expansion in treatment facility and storm water clarifier capacity will remedy the existing deficiency in peak hour capacity and the remaining 69.8% of the expanded capacity will accommodate future increased flows through 2020.

Ruekert/Mielke with assistance from Earth Tech, identified the purpose of each component of the system improvements according to the categories defined above. The cost of each component was then allocated according to the community flow shares computed for the associated category. In cases where the improvement was needed to expand capacity for both existing and increased flows, 30.2% of the cost was allocated according to community shares of existing peak hour flow, and 69.8% was allocated according to community shares of 2020 increased peak hour flow.

Table 5 shows the detailed cost allocation for the treatment facility and a summary of the allocations for the interceptor system. A brief description of the allocation for each component follows:

Treatment Facility. For the reasons described above, the treatment facility will be expanded with the addition of a second equalization tank. Since this improvement is required for both deficiency in existing capacity and increased future flows, the cost is first split between the deficiency share and the increased flow share. Thus, of the approximately \$2.79 million cost, \$844,000 is needed for existing deficiency and was allocated among participating communities according to each community's share of the existing peak hour flow. The remaining \$1.95 million is for increased flow and is allocated according to community shares of the 2020 increased peak hour flow.

Storm Water Clarifier. Like the treatment facility, the storm water clarifier will be expanded to treat both existing and future increased flows. Of the \$4.05 million cost, 30.2% or \$1.2 million, was assigned as deficiency share and allocated on the basis of community shares of existing peak hour flow. The remaining 69.8%, or \$2.8 million, was assigned to increased flow share and allocated according to community shares of 2020 increased peak hour flow.

Preliminary Treatment. The existing bar screen facility, grit removal system and conveyor have insufficient capacity for both existing and future flows. The cost of these facilities was allocated on the same basis as the treatment facility and storm water clarifier improvements. Approximately \$1.2 million was allocated according to community shares of existing peak hour flows, while \$2.7 million was allocated based on community shares of 2020 increased peak hour flows.

Primary Clarifiers. The existing system of returning waste activated sludge (WAS) to the primary clarifiers for thickening reduces the capacity of the primary clarifiers, increases the digester heating requirements and creates a need for supernating liquid from the secondary digester. Due to decreased clarifier capacity, the peak hydraulic loadings to the primary clarifiers exceed the level recommended by Wisconsin Administrative Code. The planned improvements will eliminate co-thickening of WAS with primary sludge, thereby improving the efficiency of the treatment process and increasing current clarifier capacity. In addition, four new primary clarifiers will be added to provide sufficient capacity for future increased flows. The cost for these improvements was split between existing deficiency and increased flow capacity like the above improvements. Of the \$4.3 million, 30.2% was allocated according to community shares of existing peak hour flow and 69.8% was assigned on the basis of community shares of 2020 increased peak hour flow.

Blower Building. The existing Blower No. 1 was installed in 1976 and needs to be replaced with an updated model capable of operating at higher air pressures. The new model will be capable of operating at air pressures created by air demand related to 2020 average day flow. Therefore, the cost of the improvements to the blower building was allocated based on community shares of 2020 average day flow.

Final Clarifiers. Three final clarifiers will be added to the treatment facility in order to improve the reliability of the final clarifier's performance at current peak hour flows and increase its peak hydraulic capacity to 108 MGD for treating increased future flows. Since these clarifiers are needed to provide increased capacity for both current and future peak hour flows, their cost was first split between existing deficiency and increased future flows. The 30.2% needed to increase current capacity was allocated on the basis of community shares of existing peak hour flow. The other 69.8% designated to increased future flows was allocated based on community shares of increased peak hour flow through 2020.

Return Activated Sludge Pumping. Each of the final clarifiers has a return activated sludge pumping system to transport sludge removed by the clarifier mechanism. With the addition of three new final clarifiers, the facility will also require three new sludge pumping systems. Since these systems work with the final clarifiers, their cost was allocated on the same basis as the cost of the clarifiers.

Ultraviolet Disinfection. The existing system of chlorine disinfection has consistently produced effluent well under the required limits for fecal coliform. However, the use of chlorine and sodium bisulfate poses health risks for treatment facility employees and the effluent may contain chlorinated organic compounds that would be harmful to Lake Michigan water. For these reasons, the facility plan recommended a change to the use of ultraviolet disinfection. Since the existing process is sufficient for both current and future flow and the new improvements are being put in place to improve the overall quality of the treatment facility effluent, these costs were allocated on the basis of 2020 design average flows.

New 72-inch Outfall Sewer. The existing outfall sewer does not have sufficient capacity to handle the facility's existing peak hour effluent or to meet increasing future demand. The recommended second outfall sewer will double the facility's outfall capacity to meet current and future peak hour demand through 2030. Therefore, 30.2% of the cost was designated as existing deficiency and allocated according to community shares of existing peak hour flow. The remaining 69.8% was assigned to increased flow and allocated on the basis of community shares of increased flows through 2030.

WAS Thickener Building. As mentioned earlier, Waste Activated Sludge (WAS), will no longer be returned to the primary clarifiers for thickening. This change in the treatment process will require a new separate WAS thickener building. Since these improvements will improve the

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overall treatment process and do not represent an increase in the hydraulic capacity of the facility, the cost of the new building was allocated on the basis of 2020 design average flow.

Anaerobic Digester. The facility plan recommended continuation of the current system of sludge digestion with conventional anaerobic digesters. Digestion stabilizes the sludge produced by the treatment process and destroys many of the pathogens present so that the sludge can be land spread. The digestion process takes place over a period of days, so the capacity requirements are based on the average flow to the facility. Based on projected flows, the facility will need to add one additional 90-foot diameter digester to handle increased average day flows through 2020. Therefore, the cost of the additional digester was allocated on the basis of community shares of increased average day flows.

Digester Control Building. The additional digester will require an addition to the digester control building for the associated heat exchange and pumps. The cost of these improvements was allocated on the same basis as the digester.

Digester No. 1 Rehabilitation. The existing digester will need rehabilitation to continue functioning through 2020. These improvements were allocated on the basis of community shares of 2020 design average flow.

Belt Press Feed Pump Building. The belt presses are used for thickening and dewatering sludge after it is digested. The existing belt press pumps are at the end of their useful life and will need to be replaced soon. The existing equipment has sufficient capacity to treat 2020 average day flows and its replacement will not increase the capacity of the treatment facility. Therefore, it was allocated on the basis of 2020 design average flow.

Maintenance Building Belt Press Replacement. Like the belt press pumps, the existing belt presses, conveyors and polymer tanks and pumps are near the end of their useful life and will need to be replaced. The cost of this equipment was also allocated according to community shares of 2020 design average flow.

Laboratory and Maintenance Garage. The existing laboratory is located on the second floor of the administration building. In addition to a shortage of bench top and storage space, the location of the lab creates safety concerns such as carrying gas cylinders and samples upstairs. Since there is no room for expansion in the administration building, the facility plan recommended that the existing maintenance garage be dismantled and reconstructed off-site and a new laboratory be constructed on the site. These projects were considered necessary to improve overall treatment facility operation and will not expand treatment capacity. Therefore, the costs were allocated based on community shares of 2020 design average flow.

Gas Sphere. The gas sphere stores gas generated during the digestion process so that the gas can be used to fuel the boilers and the engine drives for the aeration blowers. Approximately 30.2% of the cost was allocated on the basis of community shares of existing peak hour flow, while the other 69.8% was allocated based on community shares of increased peak hour flow through 2020.

Facility Monitoring and Control System. The facility plan recommended a central facility monitoring and control system to reduce the amount of time spent retrieving facility operating data manually from local control panels. This cost was allocated on the basis of community shares of 2020 average day flows, since it will improve facility operation but not increase hydraulic capacity.

Redundant Backup Power at Treatment Facility and Pump Station No. 1. Although the Treatment Facility and Pump Station No. 1 both have dual electrical feeds from separate

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substations, there have been power outages at each. Therefore, the facility plan recommended an additional redundant backup power source. Since this improvement will improve the treatment facility for all current and future flows but will not increase capacity, the cost was allocated on the basis of 2020 average day flow.

Demolition. The cost of demolition can be attributed primarily to those wastewater treatment facility improvements that will expand peak hour treatment capacity. Since most of the need for increased capacity will be created by future increases in flow, the cost of demolition was allocated on the basis of increased peak hour flow through 2020.

Subtotal Treatment Facility. This figure is the sum of each of the individual project elements. As shown below the dollar amount, the community shares of the subtotal range from a low of 2% for the Village of Sturtevant to a high of 45.96% for the Town of Mount Pleasant. The City of Racine would pay approximately 31.5% of the cost based on the method described above.

General Construction. General construction costs were allocated according to the percentage share of the subtotal facility costs assigned to each community.

Interceptor System Improvements

Currently, peak flows not only exceed the capacity of the treatment facility, but they exceed the capacity of certain segments of the conveyance system as well. The carrying capacity of the conveyance system was tested with a computer model simulating wet weather flows under existing and projected future conditions. Several segments were found to have insufficient capacity for both current and future peak flow conditions. The facility plan recommended a combination of infiltration/inflow reduction and the construction of three relief sewers and a temporary wastewater storage facility to handle the excess capacity. The costs of each of these projects were allocated to the appropriate municipalities using methods similar to those described above.

The first relief sewer, the Golf Road/Rapids Drive/Layard Avenue relief sewer, will be over 7,000 feet in length and will convey the flows from the Caledonia Lift Station to the intersection of Forest and Layard Avenues where the existing system has the required capacity. The cost of this sewer was allocated to the contributing municipalities as follows:

The flow contributions from each community that will use this relief sewer were estimated at the end points of each of three segments of the sewer. Flows were estimated for existing flows and 2030 flows at each endpoint, and the increase in flows was calculated as the difference between 2030 and existing flows. The existing, 2030 and increased flow contributions from each municipality for each segment was approximated using the average of the estimated flows at the two endpoints.

The existing deficiency was calculated for each segment by subtracting the total average existing flows from the existing average capacity of the segment. The increase in capacity to be created by the relief sewer was then split into the capacity needed to remedy the existing deficiency and excess capacity to handle future increased flows.

The costs for each segment were then split into a deficiency share and a growth share based on the percentage of the increase in capacity needed for the existing deficiency versus capacity needed for increased flows.

The deficiency share of the costs for each segment was allocated to each of the contributing communities based on its percentage share of the average existing flows for that particular segment.

The growth share of the costs for each segment was allocated to each of the contributing communities based on its percentage share of the increased flows for that particular segment.

The total allocation to each community is the sum of the allocations for the three segments.

Table 5 shows the computation of the cost allocation for the Golf Avenue/Rapids Drive/Layard Avenue Relief Sewer. Of the estimated total cost of this sewer, \$756,658, or 83.6% was allocated to the Town of Caledonia, \$42,486 or 4.7% to the Town of Mount Pleasant, and \$105,856 or 11.7% to the City of Racine.

The second relief sewer, the Buchanan Avenue Relief Sewer, will divert flows from the west line of the Buchanan Avenue Interceptor and take them to Lift Station No. 1 via a different route. The Buchanan Avenue interceptor collects flows from the north side of the City of Racine, Caledonia, the North Park and Crestview Sanitary Districts, North Bay and portions of Mount Pleasant.

Costs for this sewer were allocated on a similar basis to those for the Golf Avenue relief sewer, except that the Buchanan Avenue relief sewer was analyzed as a single segment. Existing and 2030 flows from each of the contributing communities were estimated for the upstream end and the downstream end of the sewer. The existing flows were compared to the existing capacity for both the upstream end and the downstream end to determine the percentage share of the expanded capacity needed for current deficiencies versus the percentage share needed to accommodate increased flows. The upstream end has no current deficiency, so all new capacity is for future increased flows. The downstream end has sufficient capacity to handle projected flows through 2030. Therefore, the entire cost of the sewer was allocated on the basis of community shares of increased flows at the upstream end of the sewer.

Of the total cost of \$764,000, Caledonia will contribute the largest share, or 59.9%, while North Park will contribute 27.3%, the City of Racine 10.8% and Mount Pleasant 2.0%, as displayed in Table 7.

The Drexel Avenue relief sewer will carry Racine flows and therefore the entire estimated cost of \$83,000 was allocated to the City of Racine.

The Facility Plan also considered several alternatives to increase the capacity of the Michigan Boulevard Interceptor and provide additional storage capacity in the system for wet weather flows. The Michigan Avenue Interceptor has sufficient capacity for 2020 flows, but would require a relief sewer by 2030. In addition, the 2020 peak hour flow reaching the facility is expected to exceed the capacity of the wastewater treatment facility, even with the construction of a second storm water clarifier on-site. Since space at the WTF site is limited, the Facility Plan recommended construction of a second storage facility near the Caledonia lift station. This storage facility will not only reduce the peak hour flow reaching the facility, but will also eliminate the need for improvements to the Michigan Boulevard Interceptor for 2030 peak hour flows.

Since the Caledonia wastewater storage meets two purposes, part of the costs were allocated on the basis of the need for the Michigan Boulevard relief sewer. The remaining costs were allocated based on 2020 peak hour flows reaching the WTF. As shown in Table 8, approximately \$1.3 million, or the estimated amount that would have been spent on the Michigan Boulevard relief sewer, was allocated on the basis of estimated community flow contributions to the Michigan Boulevard sewer. Caledonia, Mount Pleasant and the City of Racine were each allocated a portion of the cost based on their percentage share of the increase in flows through 2030.

The storage facility will also reduce the peak hour flows reaching the treatment facility, which would have otherwise exceeded the facility capacity by 2020. Therefore, the remaining cost was allocated on the basis of community shares of 2020 increased peak hour flow. Table 8 shows the total share of the cost allocated to each community.

Summary

As described above, the recommended improvements to the Wastewater Treatment Facility and the Interceptor System will be necessary to treat both existing and increased flows generated by new development in the municipalities surrounding Racine. The cost allocation developed by Ruekert/Mielke assigns the cost of each improvement based on the purpose for which it was designed and the relative contribution of each municipality to the need for the improvement. According to this method, each municipality will purchase a share of treatment capacity rights, in terms of average day, peak day and peak hour flows and loadings, up front and will in turn receive the right to discharge waste up to the limit of its purchased capacity. This provides a fair division of the costs of the improvements and relieves the Racine Wastewater Utility retail customers of the burden of carrying the majority of the capital costs for a project that is largely needed by extraterritorial customers.

In total, the Facility Plan recommended \$66.9 million of improvements to the Wastewater Treatment Facility, and \$7.9 million of improvements to the interceptor system, or approximately \$75 million, excluding local costs for inflow reduction. Based on the methodology described above, each of the participating municipalities will pay for a share of the Wastewater Treatment Facility and the Interceptor System as indicated in Table 9. In return, each municipality will receive rights to the treatment capacity shown in Table 10.

APPENDIX A

Rights, Responsibilities and Cost Sharing Under Brookfield Contract

Contracting Communities:

Rights:

- 1. Ownership share of treatment capacity allocation in terms of average daily flow, peak daily flow, and average daily BOD, TSS, TKN and Phosphorus.
- 2. Receive continuous wastewater treatment services up to amount of capacity allocation.
- 3. Make contracts with other contracting communities to carry their waste through its sewers.
- 4. Take certain actions if actions by the City make a violation of the District's Clean Water Fund (CWF) loan agreement likely (i.e. insure adequate construction and completion of the project; prevent erosion during construction; provide and maintain adequate construction inspection; assure that the plant is efficiently operated and maintained; or provide sewer service to all users in the service area).
- 5. Request additional capacity in the event of future expansion.
- 6. Reallocate some of its unused capacity to another contracting community.
- 7. Review and offer input on the annual budget for operation, maintenance and replacement.
- 8. Review telemetry equipment and SCADA system furnished by the City.

Responsibilities:

- 1. Pay for its share of the project costs for the expansion and upgrade of the treatment plant.
- 2. Undertake efforts to eliminate excess use and cease to approve new connections to the system if it is using excess capacity.
- 3. Furnish, install and maintain flowmeter equipment at the sewage metering stations.
- 4. Adopt a sewer ordinance in conformity with DNR and EPA and the sewer service agreement.
- 5. Pay quarterly charges for operation, maintenance and replacement costs in proportion to metered flow.
- 6. Finance its share of the project costs and repay its CWF loan and its share of any local borrowing done by the City.
- 7. Pay for a share of any future upgrades required by the DNR or the EPA.
- 8. Pay the City the cost of damages and any penalties if it discharges any injurious or detrimental waste into the system.

City of Brookfield:

Rights:

- 1. Collect from the contracting communities for their share of operation, maintenance and replacement costs.
- 2. Collect from the contracting communities for their share of local borrowing for plant expansion.
- 3. Receive compensation from contracting communities for any injurious or detrimental discharges.
- 4. Make final decisions regarding operation, maintenance and budget, unless such actions would interfere with the City's responsibilities under the contract.

Responsibilities:

- 1. Submit budget to contracting communities for their review and input.
- 2. Assist the contracting communities in applying for CWF loans.
- 3. Serve as the designated project management agency: prepare and let contracts; submit invoices; apply for CWF disbursements; pay contractors; ensure adequate construction of modifications and upgrades.
- 4. Construct, operate and maintain an expansion to the FRWPCC.
- 5. Provide continuous wastewater treatment service for the contracting communities.
- 6. Notify contracting communities when they reach 85% and 95% of their capacity allocation.
- 7. Furnish, install, and maintain the telemetry equipment and SCADA system.
- 8. Prepare an annual operation, maintenance and replacement budget and cost of service analysis.
- 9. Construct, operate and maintain any future expansions or upgrades to the FRWPCC required by growth or regulations.
- 10. Provide for the day-to-day operation and maintenance of the plant.

Rights and Responsibilities Common to All Parties to the Agreement

Rights:

- 1. Enforce capacity allocations for other contracting communities.
- 2. Representation on the Technical Advisory Committee.
- 3. Examine books and records of other communities.

Responsibilities:

- 1. Enforce capacity allocations limitations.
- 2. Comply with DNR and EPA regulations.
- 3. Take necessary steps to eliminate infiltration/inflow from their system.
- 4. Undertake efforts to eliminate excess use.
- 5. Keep accurate books and records.
- 6. Discuss disputes before going to formal dispute resolution.

Cost Sharing

Based on Composite Capacity Allocation Percentage which was developed using a cost of service analysis based on each communities projected flows and loadings:

- 1. Average daily flow;
- 2. Peak daily flow;
- 3. Average daily BOD;
- 4. Average daily TSS;
- 5. Average daily P; and
- 6. Average daily TKN.

Table 1 **Racine Wastewater Utility**

Existing and Projected Future Wastewater Flows $^{(1)}$

Average Daily Flow (MGD)

	Existin	ng	202	20	203	30	202	20	203	80
	Flow	Share	Flow	Share	Flow	Share	Increase	Share	Increase	Share
Racine (2)	16.32	65.06%	17.06	49.45%	18.24	44.88%	0.74	7.86%	1.92	12.35%
Mount Pleasant (3)	4.71	18.79%	10.21	29.61%	11.08	27.28%	5.50	58.45%	6.37	40.96%
Yorkville (4)	0.03	0.12%	0.91	2.64%	0.91	2.24%	0.88	9.35%	0.88	5.66%
Caledonia	1.17	4.67%	1.93	5.60%	4.22	10.39%	0.76	8.08%	3.05	19.61%
Sturtevant	0.71	2.83%	0.81	2.35%	2.02	4.97%	0.10	1.06%	1.31	8.42%
North Park	1.70	6.78%	2.64	7.65%	3.03	7.46%	0.94	9.99%	1.33	8.55%
Crestview	0.44	1.75%	0.93	2.70%	1.13	2.78%	0.49	5.21%	0.69	4.44%
	25.08	100.00%	34.49	100.00%	40.63	100.00%	9.41	100.00%	15.55	100.00%

Maximum Daily Flow (MGD)

	Exis	sting	202	20	203	30	202	20	203	80
	Flow	Share	Flow	Share	Flow	Share	Increase	Share	Increase	Share
Racine (2)	87.61	67.84%	90.59	55.00%	95.32	51.07%	2.98	8.38%	7.71	13.41%
Mount Pleasant (3)	24.52	18.99%	45.95	27.90%	49.36	26.45%	21.43	60.25%	24.84	43.21%
Yorkville (4)	0.14	0.11%	3.20	1.94%	3.20	1.71%	3.06	8.60%	3.06	5.32%
Caledonia	5.46	4.23%	8.11	4.92%	16.14	8.65%	2.65	7.45%	10.68	18.58%
Sturtevant	2.49	1.93%	2.80	1.70%	6.43	3.45%	0.31	0.87%	3.94	6.85%
North Park	6.16	4.77%	8.99	5.46%	10.16	5.44%	2.83	7.96%	4.00	6.96%
Crestview	2.76	2.14%	5.07	3.08%	6.02	3.23%	2.31	6.49%	3.26	5.67%
	129.14	100.00%	164.71	100.00%	186.63	100.00%	35.57	100.00%	57.49	100.00%

Peak Hourly Flow (MGD)

	Exis	ting	202	20	203	0	202	20	203	30
	Flow	Share	Flow	Share	Flow	Share	Increase	Share	Increase	Share
Racine (2)	105.54	60.50%	109.12	47.27%	114.83	43.80%	3.58	6.35%	9.29	10.59%
Mount Pleasant (3)	44.34	25.41%	83.15	36.01%	89.35	34.08%	38.81	68.79%	45.01	51.31%
Yorkville (4)	0.16	0.09%	3.89	1.68%	3.89	1.48%	3.73	6.61%	3.73	4.25%
Caledonia	6.97	4.00%	10.35	4.48%	20.6	7.86%	3.38	5.99%	13.63	15.54%
Sturtevant	5.09	2.92%	5.65	2.45%	12.19	4.65%	0.56	0.99%	7.10	8.09%
North Park	9.49	5.44%	13.46	5.83%	15.08	5.75%	3.97	7.04%	5.59	6.37%
Crestview	2.86	1.64%	5.25	2.27%	6.23	2.38%	2.39	4.24%	3.37	3.84%
	174.45	100.00%	230.87	100.00%	262.17	100%	56.42	100.00%	87.72	100.00%

Source: Earth Tech, December 21, 1998.

Flows assume inflow reduction.
 Includes Villages of North Bay and Elmwood Park.

^{3.} Includes Colonial Heights.

^{4.} Includes future flows from the Town of Raymond.

Table 2
Racine Wastewater Utility
Community Flow Shares

	_	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview	Total
A	Existing Peak Day Flow	67.84%	18.99%	0.11%	4.23%	1.93%	4.77%	2.14%	100.00%
В	Design 2020 Peak Day Flow	55.00%	27.90%	1.94%	4.92%	1.70%	5.46%	3.08%	100.00%
C	2020 Increased Peak Day Flow	8.38%	60.25%	8.60%	7.45%	0.87%	7.96%	6.49%	100.00%
D	Existing Average Day Flow	65.06%	18.79%	0.12%	4.67%	2.83%	6.78%	1.75%	100.00%
Е	Design 2020 Average Day Flow	49.45%	29.61%	2.64%	5.60%	2.35%	7.65%	2.70%	100.00%
F	2020 Increased Average Day Flow	7.86%	58.45%	9.35%	8.08%	1.06%	9.99%	5.21%	100.00%
G	2030 Peak Day Flow	51.07%	26.45%	1.71%	8.65%	3.45%	5.44%	3.23%	100.00%
Н	2030 Increased Peak Day Flow	13.41%	43.21%	5.32%	18.58%	6.85%	6.96%	5.67%	100.00%
I	Existing Peak Hour Flow	60.50%	25.41%	0.09%	4.00%	2.92%	5.44%	1.64%	100.00%
J	Design 2020 Peak Hour Flow	47.27%	36.01%	1.68%	4.48%	2.45%	5.83%	2.27%	100.00%
K	2020 Increased Peak Hour Flow	6.35%	68.79%	6.61%	5.99%	0.99%	7.04%	4.24%	100.00%
L	2030 Peak Hour Flow	43.80%	34.08%	1.48%	7.86%	4.65%	5.75%	2.38%	100.00%
M	2030 Increased Peak Hour Flow	10.59%	51.31%	4.25%	15.54%	8.09%	6.37%	3.84%	100.00%

Table 3
Racine Wastewater Utility
Capital Costs For Wastewater Treatment Facility Expansion and Upgrade

Treatment Plant	
2nd Equalization Tank	\$2,025,000
Stormwater Clarifier/ EQ	\$2,938,000
Preliminary Treatment	\$2,835,000
Primary Clarifiers	\$3,135,600
Blower Building	\$81,000
Final Clarifiers	\$2,801,000
Return Activated Sludge Pumping	\$473,900
Ultraviolet Disinfection	\$3,190,000
New 72-inch Outfall Sewer	\$1,104,000
WAS Thickener Building	\$4,463,000
Anaerobic Digester (90-ft diameter)	\$1,734,000
Digester Control Building	\$496,800
Digester No. 1 Rehabilitation	\$772,800
Belt Press Feed Pump Building	\$678,000
Maintenance Building Belt Press Replacement	\$1,647,000
Laboratory and Maintenance Garage	\$1,623,000
Gas Sphere	\$490,000
Plant Monitoring and Control System	\$2,088,000
Redundant Backup Power at Plant and PS 1	\$1,039,000
Demolition	\$60,000
General Construction	\$14,817,100
Subtotal Plant Improvement Costs	\$48,492,200
Contingency	\$9,698,440
Engineering, Legal, & Administrative	\$8,728,596
Total	\$66,919,236
	(123) 17 22
Interceptor System Costs	
Gulf Ave./Rapids Drive/Layard Ave. Relief Sewer	\$905,000
Buchanan Avenue Relief Sewer	\$764,000
Drexel Avenue Replacement Sewer	\$83,000
Wastewater Storage at Caledonia	\$4,000,000
Subtotal	\$5,752,000
Contingency	\$1,150,400
Engineering, Legal, & Administrative	\$1,035,360
Total	\$7,937,760
Total Wastewater Utility Costs	
Construction Improvements	\$54,244,200
Contingency	\$10,848,840
Engineering, Legal, & Administrative	\$9,763,956
Total	\$74,856,996
Local Costs for System -Wide Inflow Reduction	\$5,834,350
Total System-Wide Costs	\$80,691,346

Table 4
Racine Wastewater Utility
Calculation of Deficiency and Increased Flow Shares of New Plant Capacity Based Upon 2020 Peak Hour Design

	1	2	3	4	5	6	7	8	9	10	11
							Total		Increased		
	Existing		Deficiency		Design		Additional	Deficiency	Flow		
	Capacity		Allocation	Total	2020		Capacity	Capacity	Capacity	Deficiency	Increased Flow
	MGD	Ratio	MGD	MGD	MGD	Ratio	MGD	MGD	MGD	Share	Share
Plant	70.00	0.47	11.49	81.49	108.0	0.47	38.00	11.49	26.51	0.302	0.698
Stormwater Clarifier	80.00	0.53	12.96	92.96	122.9	0.53	42.90	12.96	29.94	0.302	0.698
Deficiency (1)	24.45		-24.45	0.00							
Peak Hour Flow	174.45	1.00	0.00	174.45	230.9	1.00	80.90	24.45	56.45		

⁽¹⁾ Deficiency refers to the amount of capacity that would be necessary to supplement existing capacity in order to adequately treat existing peak hour flows. Increased flow share refers to the amount of capacity required to serve the increase in flows, for the design year, over that of existing flows. The increased flow is equal to the current flow subtracted from the design year flows. Existing system deficiency is determined by subtracting the existing facility peak hour capacity, in terms of mgd, from total existing peak hour flows. Design 2020 plant capacity is comprised of the existing plant peak hour capacity plus additional capacity resulting from new plant improvements. The additional capacity is attributable to correcting for the existing deficiency and providing for increased flows for the design year. Capacity needed to treat increased flow is determined by subtracting the capacity needed to correct for existing deficiencies from the total amount of additional capacity needed to treat 2020 peak hour flows. The respective shares of total additional capacity are used as cost allocation percentages for those plant improvements which were designed based upon peak hour flows.

Table 5
Racine Wastewater Utility
Capital Cost Allocation Summary

Item	Allocation Method	Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Treatment Plant										
2nd Equalization Tank										
Mechanical Bar Screen			\$312,000	\$70,836	\$173,741	\$14,483	\$16,811	\$4,911	\$20,449	\$10,769
Screening Conveyor			\$16,000	\$3,633	\$8,910	\$743	\$862	\$252	\$1,049	\$552
Submersible Pumps			\$560,000	\$127,141	\$311,843	\$25,994	\$30,173	\$8,815	\$36,704	\$19,330
Structural/Architecture			\$1,137,000	\$258,141	\$633,153	\$52,778	\$61,262	\$17,897	\$74,522	\$39,246
Subtotal			\$2,025,000	\$459,750	\$1,127,648	\$93,998	\$109,108	\$31,875	\$132,724	\$69,898
Contingency			\$405,000	\$91,950	\$225,530	\$18,800	\$21,822	\$6,375	\$26,545	\$13,980
Engineering, Legal, & Administrative	ve		\$364,500	\$82,755	\$202,977	\$16,920	\$19,639	\$5,738	\$23,890	\$12,582
Total			\$2,794,500	\$634,455	\$1,556,154	\$129,717	\$150,569	\$43,988	\$183,159	\$96,459
Deficiency Share (1)	Existing Peak Hour Flow	I	\$844,115	\$510,698	\$214,529	\$774	\$33,726	\$24,629	\$45,919	\$13,839
Increased Flow Share		K	\$1,950,385	\$123,757	\$1,341,624	\$128,943	\$116,843	\$19,359	\$137,239	\$82,620
Stormwater Clarifier/ EQ										
Clarifier Mechanism			\$343,000	\$77,874	\$191,004	\$15,922	\$18,481	\$5,399	\$22,481	\$11,839
54 inch effluent pipe			\$162,000	\$36,780	\$90,212	\$7,520	\$8,729	\$2,550	\$10,618	\$5,592
Structural			\$2,081,000	\$472,464	\$1,158,832	\$96,597	\$112,125	\$32,757	\$136,394	\$71,831
Relocation of Influent Sewer to Preli	minary Treatment		\$352,000	\$79,917	\$1,136,632	\$16,339	\$18,966	\$5,541	\$23,071	\$12,150
Subtotal	illilary Treatment		\$2,938,000	\$667,035	\$1,636,064	\$136,378	\$158,301	\$46,247	\$192,564	\$101,412
Contingency			\$587,600	\$133,407	\$327,213	\$27,276	\$31,660	\$9,249	\$38,513	\$20,282
Engineering, Legal, & Administrativ	ue.		\$528,840	\$120,066	\$294,491	\$24,548	\$28,494	\$8,324	\$34,662	\$18,254
Total	•••		\$4,054,440	\$920,508	\$2,257,768	\$188,201	\$218,456	\$63,820	\$265,738	\$139,949
Total			94,034,440	\$920,508	\$2,237,700	\$100,201	\$216,430	\$03,620	\$203,738	\$139,949
Deficiency Share (1)	Existing Peak Hour Flow	I	\$1,224,696	\$740,954	\$311,253	\$1,123	\$48,932	\$35,733	\$66,623	\$20,078
Increased Flow Share	Increased Peak Hour Flow	K	\$2,829,744	\$179,555	\$1,946,515	\$187,078	\$169,524	\$28,087	\$199,115	\$119,870
Preliminary Treatment										
Bar Screens			\$624,000	\$141,788	\$347,389	\$28,951	\$33,617	\$9,826	\$40,895	\$21,533
Pista Grits/Dewatering Screws			\$387,000	\$87,936	\$215,448	\$17,955	\$20,849	\$6,094	\$25,363	\$13,355
Conveyors			\$131,000	\$29,766	\$72,929	\$6,078	\$7,057	\$2,063	\$8,585	\$4,521
Structural/Arch			\$1,693,000	\$384,690	\$942,516	\$78,549	\$91,208	\$26,660	\$110,954	\$58,423
Subtotal			\$2,835,000	\$644,180	\$1,578,283	\$131,533	\$152,732	\$44,644	\$185,797	\$97,831
Contingency			\$567,000	\$128,836	\$315,657	\$26,307	\$30,546	\$8,929	\$37,159	\$19,566
Engineering, Legal, & Administrativ	ve		\$510,300	\$115,952	\$284,091	\$23,676	\$27,492	\$8,036	\$33,444	\$17,610
Total			\$3,912,300	\$888,968	\$2,178,030	\$181,515	\$210,770	\$61,609	\$256,400	\$135,007
Deficiency Share	Existing Peak Hour Flow	I	\$1,183,110	\$715,794	\$300,684	\$1,085	\$47,270	\$34,520	\$64,361	\$19,396
Increased Flow Share	Increased Peak Hour Flow	K	\$2,729,190	\$173,174	\$1,877,346	\$180,430	\$163,500	\$27,089	\$192,040	\$115,611
increased flow Share	meteased reak flour Flow	K	\$4,749,190	\$173,174	\$1,077,340	\$100,430	\$105,500	\$41,089	\$192,040	\$115,011

¹⁾ Deficiency Share and Increased Flow Share are based on deficiency/increased flow allocation for the Stormwater Clarifier.

Primary Clarifiers

<u>Item</u>	Allocation Method	Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Primary Sludge Pump			\$15,600	\$3,545	\$8,685	\$724	\$840	\$246	\$1,022	\$538
Clarifier Mechanisms			\$624,000	\$141,788	\$347,389	\$28,951	\$33,617	\$9,826	\$40,895	\$21,533
Structural			\$2,496,000	\$567,151	\$1,389,557	\$115,805	\$134,469	\$39,306	\$163,580	\$86,133
Subtotal			\$3,135,600	\$712,483	\$1,745,631	\$145,480	\$168,926	\$49,378	\$205,498	\$108,205
Contingency			\$627,120	\$142,497	\$349,126	\$29,096	\$33,785	\$9,876	\$41,100	\$21,641
Engineering, Legal, & Administrative	:		\$564,408	\$128,247	\$314,214	\$26,186	\$30,407	\$8,888	\$36,990	\$19,477
Total			\$4,327,128	\$983,227	\$2,408,970	\$200,762	\$233,118	\$68,141	\$283,587	\$149,322
Deficiency Share	Existing Peak Hour Flow	I	\$1,308,558	\$791,691	\$332,566	\$1,200	\$52,282	\$38,180	\$71,185	\$21,453
Increased Flow Share	Increased Peak Hour Flow	K	\$3,018,570	\$191,536	\$2,076,404	\$199,562	\$180,836	\$29,961	\$212,402	\$127,869
Blower Building			\$21,000	\$40.050	#22.00¢	#2.12 7	64.522	\$1,002	# c 200	#2.104
Replace Blower No. 1			\$81,000	\$40,058	\$23,986	\$2,137	\$4,533	\$1,902	\$6,200	\$2,184
Contingency Engineering, Legal, & Administrative			\$16,200 \$14,580	\$8,012 \$7,210	\$4,797	\$427 \$385	\$907 \$816	\$380 \$342	\$1,240	\$437 \$393
Total Administrative		Е	\$14,580 \$111,780	\$55,279	\$4,318 \$33,101	\$2,949	\$6,255	\$2,625	\$1,116 \$8,556	\$3,014
rotai	Design Average Flow	E	\$111,760	\$33,279	\$33,101	\$2,949	\$0,233	\$2,023	\$6,330	\$3,014
Final Clarifiers										
Clarifier Mechanisms			\$406,000	\$92,253	\$226,026	\$18,837	\$21,873	\$6,393	\$26,608	\$14,010
Structural			\$2,395,000	\$544,201	\$1,333,329	\$111,119	\$129,027	\$37,715	\$156,961	\$82,648
Subtotal			\$2,801,000	\$636,454	\$1,559,354	\$129,955	\$150,900	\$44,109	\$183,569	\$96,658
Contingency Engineering, Legal, & Administrative			\$560,200 \$504,180	\$127,291 \$114,562	\$311,871 \$280,684	\$25,991 \$23,392	\$30,180 \$27,162	\$8,822 \$7,940	\$36,714 \$33,042	\$19,332 \$17,398
Total	:		\$3,865,380	\$878,307	\$2,151,909	\$179,339	\$208,242	\$60,870	\$253,325	\$133,388
Deficiency Share	Existing Peak Hour Flow	I	\$1,168,921	\$707,209	\$297,078	\$1,072	\$46,703	\$34,106	\$63,589	\$19,164
Increased Flow Share	Increased Peak Hour Flow	K	\$2,696,459	\$171,098	\$1,854,831	\$178,266	\$161,539	\$26,764	\$189,737	\$114,224
Return Activated Sludge Pumping										
RAS Pumps			\$150,000	\$34,084	\$83,507	\$6,959	\$8,081	\$2,362	\$9,831	\$5,176
Scum Pump			\$16,500	\$3,749	\$9,186	\$766	\$889	\$260	\$1,081	\$569
Scum Mixer			\$16,500	\$3,749	\$9,186	\$766	\$889	\$260	\$1,081	\$569
Structural / Architecture			\$290,900	\$66,099	\$161,948	\$13,497	\$15,672	\$4,581	\$19,065	\$10,038
Subtotal			\$473,900	\$107,681	\$263,826	\$21,987	\$25,531	\$7,463	\$31,058	\$16,354
Contingency			\$94,780	\$21,536	\$52,765	\$4,397	\$5,106	\$1,493	\$6,212	\$3,271
Engineering, Legal, & Administrative	:		\$85,302	\$19,383	\$47,489	\$3,958	\$4,596	\$1,343	\$5,590	\$2,944
Total			\$653,982	\$148,600	\$364,081	\$30,342	\$35,232	\$10,299	\$42,860	\$22,568
Deficiency Share	Existing Peak Hour Flow	I	\$197,769	\$119,652	\$50,263	\$181	\$7,902	\$5,770	\$10,759	\$3,242
Increased Flow Share	Increased Peak Hour Flow	K	\$456,213	\$28,948	\$313,818	\$30,161	\$27,331	\$4,528	\$32,101	\$19,326
<u>Ultraviolet Disinfection</u>										
UV Modules Structural			\$2,790,000 \$200,000	\$633,955 \$45,445	\$1,553,230 \$111,343	\$129,445 \$9,279	\$150,308 \$10,775	\$43,935 \$3,149	\$182,848 \$13,107	\$96,278 \$6,902
Suuctuiai			\$200,000	φ+υ,+43	φ111,343	97,419	\$10,773	φ3,149	\$13,107	φ0,902

Item	Allocation Method	Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Miscellaneous Channel Modifications			\$200,000	\$45,445	\$111,343	\$9,279	\$10,775	\$3,149	\$13,107	\$6,902
Subtotal			\$3,190,000	\$724,844	\$1,775,916	\$148,004	\$171,857	\$50,234	\$209,063	\$110,082
Contingency			\$638,000	\$144,969	\$355,183	\$29,601	\$34,371	\$10,047	\$41,813	\$22,016
Engineering, Legal, & Administrative			\$574,200	\$130,472	\$319,665	\$26,641	\$30,934	\$9,042	\$37,631	\$19,815
Total			\$4,402,200	\$1,000,285	\$2,450,764	\$204,245	\$237,163	\$69,324	\$288,507	\$151,913
Deficiency Share	Existing Peak Hour Flow	I	\$1,331,260	\$805,426	\$338,336	\$1,221	\$53,189	\$38,843	\$72,420	\$21,825
Increased Flow Share	Increased Peak Hour Flow	K	\$3,070,940	\$194,859	\$2,112,428	\$203,024	\$183,973	\$30,481	\$216,087	\$130,088
New 72-inch Outfall Sewer										
Outfall Sewer			\$1,104,000	\$237,025	\$504,156	\$36,932	\$143,764	\$76,901	\$68,109	\$37,113
Contingency			\$220,800	\$47,405	\$100,831	\$7,386	\$28,753	\$15,380	\$13,622	\$7,423
Engineering, Legal, & Administrative			\$198,720	\$42,664	\$90,748	\$6,648	\$25,877	\$13,842	\$12,260	\$6,680
Total			\$1,523,520	\$327,094	\$695,735	\$50,966	\$198,394	\$106,123	\$93,990	\$51,216
Deficiency Share	Existing Peak Hour Flow	I	\$332,086	\$200,915	\$84,399	\$305	\$13,268	\$9,689	\$18,065	\$5,444
Increased Flow Share	2030 Incr. Peak Hour Flow	M	\$1,191,434	\$126,179	\$611,337	\$50,662	\$185,126	\$96,434	\$75,925	\$45,772
WAS Thickener Building										
Belt Thickener Feed Pumps			\$317,000	\$156,769	\$93,872	\$8,364	\$17,739	\$7,445	\$24,264	\$8,548
Belt Thickeners			\$972,000	\$480,691	\$287,835	\$25,646	\$54,391	\$22,827	\$74,401	\$26,209
Polymer System			\$104,000	\$51,432	\$30,797	\$2,744	\$5,820	\$2,442	\$7,961	\$2,804
W3 System			\$97,000	\$47,970	\$28,724	\$2,559	\$5,428	\$2,278	\$7,425	\$2,616
Thickened Sludge Pumps			\$97,000	\$47,970	\$28,724	\$2,559	\$5,428	\$2,278	\$7,425	\$2,616
Mixer			\$25,000	\$12,363	\$7,403	\$660	\$1,399	\$587	\$1,914	\$674
Aeration Equipment (feed well)			\$61,000	\$30,167	\$18,064	\$1,609	\$3,413	\$1,433	\$4,669	\$1,645
Blowers			\$66,000	\$32,640	\$19,544	\$1,741	\$3,693	\$1,550	\$5,052	\$1,780
Structural/Architecture			\$2,724,000	\$1,347,121	\$806,647	\$71,871	\$152,430	\$63,973	\$208,506	\$73,451
Subtotal			\$4,463,000	\$2,207,123	\$1,321,611	\$117,754	\$249,742	\$104,814	\$341,616	\$120,342
Contingency			\$892,600	\$441,425	\$264,322	\$23,551	\$49,948	\$20,963	\$68,323	\$24,068
Engineering, Legal, & Administrative			\$803,340	\$397,282	\$237,890	\$21,196	\$44,953	\$18,866	\$61,491	\$21,662
Total	Design Average Flow	E	\$6,158,940	\$3,045,829	\$1,823,823	\$162,500	\$344,643	\$144,643	\$471,429	\$166,072
Anaerobic Digester (90-ft diameter)										
Gas Mixing System			\$186,000	\$14,627	\$108,714	\$17,394	\$15,022	\$1,977	\$18,580	\$9,685
Floating Cover			\$564,000	\$44,353	\$329,649	\$52,744	\$45,552	\$5,994	\$56,340	\$29,369
Structural			\$984,000	\$77,382	\$575,133	\$92,021	\$79,473	\$10,457	\$98,295	\$51,239
Subtotal			\$1,734,000	\$136,361	\$1,013,496	\$162,159	\$140,047	\$18,427	\$173,216	\$90,293
Contingency			\$346,800 \$312,120	\$27,272 \$24,545	\$202,699 \$182,429	\$32,432 \$29,189	\$28,009 \$25,208	\$3,685 \$3,317	\$34,643	\$18,059
Engineering, Legal, & Administrative Total	In and A control Elem	F			\$1,398,625	\$29,189			\$31,179 \$239,038	\$16,253 \$124,605
Total	Increased Average Flow	г	\$2,392,920	\$188,179	\$1,398,623	\$223,780	\$193,265	\$25,430	\$239,038	\$124,003
Digester Control Building Heat Exchanger			\$168,000	\$13,211	\$98,193	\$15,711	\$13,569	\$1,785	\$16,782	\$8,748
Gas Safety Equipment			\$60,000	\$4,718	\$35,069	\$5,611	\$4,846	\$638	\$5,994	\$3,124
* * *							. ,			
Recirculation pumps			\$33,600	\$2,642	\$19,639	\$3,142	\$2,714	\$357	\$3,356	\$1,750

Substant	Item	Allocation Method	Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Contingency S90-360 S7,814 S88,074 S9,292 S8,025 S1,056 S9,022 S9,025 S1,026 Total Increased Average Flow F S685,584 S53,914 S400,713 S64,114 S55,371 S7,286 S68,486 S55,771 S7,028 S68,486 S68,4	Structural/Architecture			\$168,000	\$13,211	\$98,193	\$15,711	\$13,569	\$1,785	\$16,782	\$8,748
Empireming Legal, & Administrative S894,44 \$7,002 \$52,07 \$8,361 \$7,222 \$9,00 \$8,033 \$4.00 Total Increased Average Flow F \$885,584 \$553,914 \$90,713 \$564,144 \$55,571 \$7,236 \$68,466 \$555,775 Total S89,454 \$75,002 \$1,000 \$1	Subtotal			\$496,800	\$39,068	\$290,372	\$46,460	\$40,124	\$5,279	\$49,627	\$25,870
Total Incressed Average Plow F \$685,584 \$53,914 \$440,713 \$64,114 \$55,371 \$7,286 \$56,486 \$33,75	Contingency			\$99,360	\$7,814	\$58,074	\$9,292	\$8,025	\$1,056	\$9,925	\$5,174
	Engineering, Legal, & Administrative			\$89,424	\$7,032	\$52,267	\$8,363	\$7,222	\$950	\$8,933	\$4,657
Remove Fassing Cover	Total	Increased Average Flow	F	\$685,584	\$53,914	\$400,713	\$64,114	\$55,371	\$7,286	\$68,486	\$35,700
New Plonsing Civer	Digester No. 1 Rehabilitation										
Sinking System	Remove Existing Cover			\$22,800	\$11,275	\$6,752	\$602	\$1,276	\$535	\$1,745	\$615
Subtotal	New Floating Cover			\$564,000	\$278,919	\$167,015	\$14,881	\$31,560	\$13,246	\$43,171	\$15,20
Signatur						\$55,079			\$4,368		\$5,01:
Engineering Legal, & Administrative S139,104 S68,792 S41,192 S3,670 S7,784 S3,267 S10,648 S3,77 Total Design Average Flow E S1,066,464 S527,407 S315,808 S28,138 S59,677 S25,046 S81,631 S28,75 Selt Press Feed Pump Building Belt Press Pumps S192,000 S94,951 S56,856 S50,666 S10,744 S4,509 S14,696 S5,77 Mixer	Subtotal			\$772,800	\$382,179	\$228,846	\$20,390	\$43,245	\$18,149	\$59,153	\$20,83
Selt Press Feed Pump Building	Contingency			\$154,560	\$76,436	\$45,769	\$4,078	\$8,649	\$3,630	\$11,831	\$4,16
Belt Press Feed Pump Building Sale Press Pender Sale Press P	Engineering, Legal, & Administrative			\$139,104	\$68,792	\$41,192	\$3,670	\$7,784	\$3,267	\$10,648	\$3,75
Belt Press Pumps \$192,000 \$94,951 \$56,856 \$5,066 \$10,744 \$4,509 \$14,096 \$5,176 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,187 \$1,	Total	Design Average Flow	Е	\$1,066,464	\$527,407	\$315,808	\$28,138	\$59,677	\$25,046	\$81,631	\$28,756
Belt Press Pumps \$192,000 \$94,951 \$56,856 \$5,066 \$10,744 \$4,509 \$14,096 \$5,176 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,000 \$1,178 \$1,187 \$1,	Belt Press Feed Pump Building										
Mixer				\$192,000	\$94,951	\$56,856	\$5,066	\$10,744	\$4,509	\$14,696	\$5,177
Structural/Architecture											\$97
Subtotal Soft8,000 \$33,297 \$200,773 \$17,889 \$37,940 \$15,923 \$51,897 \$18,297 \$135,600 \$67,059 \$401,155 \$35,788 \$7,588 \$31,855 \$10,379 \$33,655 \$10,0379 \$34,045 \$15,000 \$20,0333 \$36,139 \$33,220 \$6,629 \$2,266 \$39,341 \$33,225 \$33,000											
Signatur											\$18.28
Engineering, Legal, & Administrative \$122,040 \$60,353 \$36,139 \$3,220 \$56,829 \$2,866 \$9,341 \$3,255 \$1,041 \$1							. ,		. ,		, .
Maintenance Building Belt Press Replacement											
Remove Belt Presses \$2,000 \$14,342 \$8,588 \$765 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$2,220 \$578 \$1,623 \$681 \$1,623 \$		Design Average Flow	Е								\$25,229
Remove Belt Presses \$29,000											
New Belt Presses	•	<u>nt</u>									
Polymer Storage Tanks \$18,000 \$8,902 \$5,330 \$475 \$1,007 \$423 \$1,378 \$48 \$1,000 \$10,000 \$12,888 \$7,699 \$686 \$1,455 \$611 \$1,990 \$70 \$1,000 \$10,000 \$12,888 \$7,699 \$686 \$1,455 \$611 \$1,990 \$70 \$1,000 \$1,000 \$12,888 \$1,000 \$12,888 \$1,000 \$12,888 \$1,000 \$12,888 \$1,000 \$12,889 \$1,000 \$1,500 \$1,00											
Liquid Polymer Transfer Pumps \$26,000 \$12,858 \$7,699 \$686 \$1,455 \$611 \$1,990 \$700							. ,		. ,		
Polymer Mix / Storage Equipment											\$48
Conveyors											
Polymer Solution Feeders \$93,000 \$45,992 \$27,540 \$2,454 \$5,204 \$2,184 \$7,119 \$2,50 \$2,600 \$11,869 \$7,107 \$633 \$1,343 \$564 \$1,837 \$665 \$2,4000 \$11,869 \$7,107 \$633 \$1,343 \$564 \$1,837 \$665 \$2,4000 \$164,000 \$814,504 \$487,720 \$43,455 \$92,163 \$38,680 \$126,068 \$44,41 \$6,001 \$633 \$1,343 \$7,736 \$126,068 \$44,41 \$6,001 \$1,400 \$162,901 \$1,400 \$1,											
Remove Existing C12 Equipment \$24,000 \$11,869 \$7,107 \$633 \$1,343 \$564 \$1,837 \$667 Subtotal \$1,647,000 \$814,504 \$487,720 \$43,455 \$92,163 \$38,680 \$126,068 \$44,41 Contingency \$329,400 \$162,901 \$97,544 \$8,691 \$18,433 \$7,736 \$25,214 \$8,88 Engineering, Legal, & Administrative \$296,460 \$146,611 \$87,790 \$7,822 \$16,589 \$6,962 \$22,692 \$7,99 Total Design Average Flow E \$2,272,860 \$1,124,015 \$673,053 \$59,968 \$127,185 \$53,378 \$173,974 \$61,28 Laboratory and Maintenance Garage \$362,000 \$179,023 \$107,198 \$9,551 \$20,257 \$8,502 \$27,709 \$9,76 New Off-Site Maintenance Garage \$1,261,000 \$623,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$34,76 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>											
Subtotal \$1,647,000 \$814,504 \$487,720 \$43,455 \$92,163 \$38,680 \$126,068 \$44,41 Contingency \$329,400 \$162,901 \$97,544 \$8,691 \$18,433 \$7,736 \$25,214 \$8,88 Engineering, Legal, & Administrative \$296,460 \$146,611 \$87,790 \$7,822 \$16,589 \$6,962 \$22,692 \$7,95 Total Design Average Flow E \$2,272,860 \$1,124,015 \$673,053 \$59,968 \$127,185 \$53,378 \$173,974 \$61,28 Laboratory and Maintenance Garage \$1,261,000 \$179,023 \$107,198 \$9,551 \$20,257 \$8,502 \$27,709 \$9,76 New Off-Site Maintenance Garage \$1,261,000 \$623,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$9,76 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,								. ,			
Contingency \$329,400 \$162,901 \$97,544 \$8,691 \$18,433 \$7,736 \$25,214 \$8,88 Engineering, Legal, & Administrative \$296,460 \$146,611 \$87,790 \$7,822 \$16,589 \$6,962 \$22,692 \$7,995 Total Design Average Flow E \$2,272,860 \$1,124,015 \$673,053 \$59,968 \$127,185 \$53,378 \$173,974 \$61,28 Laboratory and Maintenance Garage \$362,000 \$179,023 \$107,198 \$9,551 \$20,257 \$8,502 \$27,709 \$9,76 New Off-Site Maintenance Garage \$1,261,000 \$623,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$34,00 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,75 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348											\$64
Engineering, Legal, & Administrative \$296,460 \$146,611 \$87,790 \$7,822 \$16,589 \$6,962 \$22,692 \$7,955											
Total Design Average Flow E \$2,272,860 \$1,124,015 \$673,053 \$59,968 \$127,185 \$53,378 \$173,974 \$61,285	<i>e</i> ,										\$8,88
Laboratory and Maintenance Garage \$362,000 \$179,023 \$107,198 \$9,551 \$20,257 \$8,502 \$27,709 \$96,522 New Off-Site Maintenance Garage \$1,261,000 \$623,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$34,00 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,75 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,87											\$7,99
Laboratory (Remodel Maintenance Garage) \$362,000 \$179,023 \$107,198 \$9,551 \$20,257 \$8,502 \$27,709 \$9,76 New Off-Site Maintenance Garage \$1,261,000 \$623,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$34,00 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,75 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,87	Total	Design Average Flow	Е	\$2,272,860	\$1,124,015	\$673,053	\$59,968	\$127,185	\$53,378	\$173,974	\$61,286
New Off-Site Maintenance Garage \$1,261,000 \$622,612 \$373,415 \$33,271 \$70,563 \$29,615 \$96,522 \$33,00 Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,75 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,85	Laboratory and Maintenance Garage			A							
Subtotal \$1,623,000 \$802,635 \$480,613 \$42,822 \$90,820 \$38,116 \$124,231 \$43,76 Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,75 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,87	• .	rage)									
Contingency \$324,600 \$160,527 \$96,123 \$8,564 \$18,164 \$7,623 \$24,846 \$8,752 Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,872											\$34,002
Engineering, Legal, & Administrative \$292,140 \$144,474 \$86,510 \$7,708 \$16,348 \$6,861 \$22,362 \$7,87											
											\$8,753
Total Design Average Flow E \$2,239,740 \$1,107,636 \$663,245 \$59,094 \$125,332 \$52,600 \$171,438 \$60,395											\$7,877
	Total	Design Average Flow	E	\$2,239,740	\$1,107,636	\$663,245	\$59,094	\$125,332	\$52,600	\$171,438	\$60,393

<u>Item</u>	Allocation Method	Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Gas Sphere			¢400.000	0111 040	#272.700	#22.72.1	02 < 200	\$7.71 <	#22.112	Ø1 < 000
Relocate Gas Sphere			\$490,000	\$111,340	\$272,790	\$22,734	\$26,398	\$7,716	\$32,113	\$16,909
Contingency			\$98,000 \$88,200	\$22,268 \$20,041	\$54,558 \$40,103	\$4,547	\$5,280 \$4,752	\$1,543 \$1,389	\$6,423 \$5,780	\$3,382
Engineering, Legal, & Administrative Total			\$676,200	\$153,649	\$49,102 \$376,450	\$4,092 \$31,373	\$4,752 \$36,429	\$1,389	\$44,316	\$3,044 \$23,335
Totai			\$070,200	\$133,049	\$370,430	\$31,373	\$30,429	\$10,048	\$44,510	\$23,333
Deficiency Share	Existing Peak Hour Flow	I	\$204,488	\$123,717	\$51,970	\$188	\$8,170	\$5,966	\$11,124	\$3,352
Increased Flow Share	Increased Peak Hour Flow	K	\$471,712	\$29,931	\$324,480	\$31,185	\$28,259	\$4,682	\$33,192	\$19,982
Plant Monitoring and Control System										
Plant Monitoring and Control System			\$2,088,000	\$1,032,595	\$618,311	\$55,091	\$116,841	\$49,037	\$159,824	\$56,302
Contingency			\$417,600	\$206,519	\$123,662	\$11,018	\$23,368	\$9,807	\$31,965	\$11,260
Engineering, Legal, & Administrative			\$375,840	\$185,867	\$111,296	\$9,916	\$21,031	\$8,827	\$28,768	\$10,134
Total	Design Average Flow	Е	\$2,881,440	\$1,424,981	\$853,269	\$76,025	\$161,240	\$67,671	\$220,557	\$77,696
Redundant Backup Power at Plant and PS 1										
Redundant Backup Power			\$1,039,000	\$513,825	\$307,675	\$27,413	\$58,141	\$24,401	\$79,529	\$28,016
Contingency			\$207,800	\$102,765	\$61,535	\$5,483	\$11,628	\$4,880	\$15,906	\$5,603
Engineering, Legal, & Administrative Total	Design Average Flow	E	\$187,020 \$1,433,820	\$92,488 \$709,078	\$55,381 \$424,591	\$4,934 \$37,831	\$10,465 \$80,234	\$4,392 \$33,673	\$14,315 \$109,750	\$5,043 \$38,662
Total	Design Average Flow	L	\$1,433,620	\$109,016	9424,391	\$37,031	\$60,234	\$33,073	\$105,730	\$30,002
Demolition Demolition			\$60,000	\$3,807	\$41,273	\$3,967	\$3,594	\$596	\$4,222	\$2,542
Contingency			\$12,000	\$761	\$8,255	\$793	\$719	\$119	\$844	\$508
Engineering, Legal, & Administrative			\$10,800	\$685	\$7,429	\$793 \$714	\$647	\$107	\$760	\$457
Total	Increased Peak Hour Flow	K	\$82,800	\$5,254	\$56,956	\$5,474	\$4,960	\$822	\$5,826	\$3,507
Subtotal Plant			\$33,675,100	\$10,608,245	\$15,478,342	\$1,406,537	\$1,984,706	\$673,891	\$2,416,077	\$1,107,302
Plant Improvement Costs Contingency			\$6,735,020	\$2,121,649	\$3,095,668	\$1,400,337	\$396,941	\$134,778	\$483,215	\$221,460
Engineering, Legal, & Administrative			\$6,061,518	\$1,909,484	\$2,786,102	\$253,177	\$357,247	\$121,300	\$434,894	\$199,314
Total			\$46,471,638	\$14,639,378	\$21,360,112	\$1,941,021	\$2,738,894	\$929,970	\$3,334,186	\$1,528,077
Community Shares			100%	31.50%	45.96%	4.18%	5.89%	2.00%	7.17%	3.29%
•										
General Construction										
Site Work (6%)			\$2,020,500	\$636,493	\$928,698	\$84,392	\$119,082	\$40,433	\$144,964	\$66,438
Plumbing/ HVAC (8%)			\$2,694,000	\$848,657	\$1,238,264	\$112,523	\$158,776	\$53,911	\$193,286	\$88,584
Process Piping (15%)			\$5,051,300	\$1,591,248	\$2,321,767	\$210,982	\$297,708	\$101,084	\$362,414	\$166,097
Electrical (15%)			\$5,051,300	\$1,591,248	\$2,321,767	\$210,982	\$297,708	\$101,084	\$362,414	\$166,097
Subtotal			\$14,817,100	\$4,667,645	\$6,810,496	\$618,878	\$873,274	\$296,513	\$1,063,078	\$487,215
Contingency			\$2,963,420	\$933,529	\$1,362,099	\$123,776	\$174,655	\$59,303	\$212,616	\$97,443
Engineering, Legal, & Administrative			\$2,667,078	\$840,176	\$1,225,889	\$111,398	\$157,189	\$53,372	\$191,354	\$87,699
Total (Allo	cated based on community shares	of plant costs)	\$20,447,598	\$6,441,351	\$9,398,485	\$854,052	\$1,205,118	\$409,188	\$1,467,047	\$672,357

Item Allocation Method Code	Total Cost	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Total Plant								
Plant Improvement Costs	\$48,492,200	\$15,275,891	\$22,288,838	\$2,025,415	\$2,857,980	\$970,404	\$3,479,154	\$1,594,517
Contingency	\$9,698,440	\$3,055,178	\$4,457,768	\$405,083	\$571,596	\$194,081	\$695,831	\$318,903
Engineering, Legal, & Administrative	\$8,728,596	\$2,749,660	\$4,011,991	\$364,575	\$514,436	\$174,673	\$626,248	\$287,013
Total	\$66,919,236	\$21,080,729	\$30,758,597	\$2,795,073	\$3,944,013	\$1,339,158	\$4,801,233	\$2,200,434
Community Shares of Plant Costs	100.00%	31.50%	45.96%	4.18%	5.89%	2.00%	7.17%	3.29%
Interceptor System Costs								
Golf Ave./Rapids Drive/Layard Ave. Relief Sewer	\$905,000	\$105,856	\$42,486	\$0	\$756,658	\$0	\$0	\$0
Buchanan Avenue Relief Sewer	\$764,000	\$82,885	\$14,966	\$0	\$457,290	\$0	\$208,859	\$0
Drexel Avenue Replacement Sewer	\$83,000	\$83,000	\$0	\$0	\$0	\$0	\$0	\$0
Wastewater Storage at Caledonia	\$4,000,000	\$339,043	\$1,899,086	\$180,225	\$1,247,287	\$27,058	\$191,821	\$115,479
Subtotal	\$5,752,000	\$610,784	\$1,956,538	\$180,225	\$2,461,235	\$27,058	\$400,680	\$115,479
Contingency	\$1,150,400	\$122,157	\$391,308	\$36,045	\$492,247	\$5,412	\$80,136	\$23,096
Engineering, Legal, & Administrative	\$1,035,360	\$109,941	\$352,177	\$32,441	\$443,022	\$4,870	\$72,122	\$20,786
Total (See Interceptor System Allocation Worksheets)	\$7,937,760	\$842,882	\$2,700,022	\$248,711	\$3,396,504	\$37,340	\$552,939	\$159,362
Total Wastewater Utility Costs								
Construction Improvements	\$54,244,200	\$15,886,675	\$24,245,376	\$2,205,640	\$5,319,215	\$997,462	\$3,879,835	\$1,709,997
Contingency	\$10,848,840	\$3,177,335	\$4,849,075	\$441,128	\$1,063,843	\$199,492	\$775,967	\$341,999
Engineering, Legal, & Administrative	\$9,763,956	\$2,859,602	\$4,364,168	\$397,015	\$957,459	\$179,543	\$698,370	\$307,799
Total	\$74,856,996	\$21,923,612	\$33,458,619	\$3,043,784	\$7,340,517	\$1,376,498	\$5,354,172	\$2,359,795
Community Shares of Total Wastewater Utility Costs	100.00%	29.29%	44.70%	4.07%	9.81%	1.84%	7.15%	3.15%
Local Costs for System -Wide Inflow Reduction	\$5,834,350	\$1,506,408	\$1,722,309	\$101,016	\$924,669	\$358,607	\$925,138	\$296,203
Total System-Wide Costs	\$80,691,346	\$23,430,020	\$35,180,928	\$3,144,800	\$8,265,186	\$1,735,105	\$6,279,310	\$2,655,999
Community Shares of Total Costs	100.00%	29.04%	43.60%	3.90%	10.24%	2.15%	7.78%	3.29%

Notes:

Costs are as shown in the February, 1998, Final Draft Facilities Plan for the Racine Wastewater Utility, Table 11-5, with the addition of costs for the Drexel Avenue Replacement Sewer and the System-Wide Inflow Reduction.

Table 6 **Racine Wastewater Utility** Golf Ave./Rapids Drive/Layard Ave Relief Sewer **Capital Cost Allocation**

			Mt.		Total
Flows (cfs)		Caledonia	Pleasant	Racine	Flow
			Existi	ing	
AO420		16.53	0.00	0.13	16.65
AO414		16.53	3.05	1.18	20.75
Segment A	Average	16.53	1.52	0.65	18.70
	Existing Share	0.884	0.082	0.035	1.00
			203	D	
AO420		42.02	0.00	2.92	44.94
AO414		42.02	3.89	4.60	50.51
Segment A	Average	42.02	1.94	3.76	47.73
	2030 Share	0.880	0.041	0.079	1.000
			Increa	ise	
AO420		25.50	0.00	2.79	28.29
AO414		25.50	0.84	3.42	29.7
Segment A	Average	25.50	0.42	3.11	29.02
	Growth Share	0.878	0.014	0.11	1.00

Calculation of Deficiency/Increased Flow Share of $Cost^{\!\!\!\! (1)}$

	Existing	Existing	Excess	Design	Total	Def.	Flow
Flows (cfs)	Flow	Capacity	(Deficiency)	2030	Increase	Share	Share
AO420	16.65	12.39	-4.26	44.94	32.55	0.131	0.869
AO414	20.75	18.01	-2.74	50.51	32.50	0.084	0.916
Segment A	18.70	15.20	-3.50	47.73	32.53	0.108	0.892

Calculation of Communit	y Shares of C	Cost	Segment A	
	Caledonia	Mt. Pleasant	Racine	Total
Deficiency Share	\$9,202	\$849	\$362	\$10,413
Growth Share	\$75,866	\$1,251	\$9,253	\$86,370
Total	\$85,068	\$2,100	\$9.615	\$96.783

Calculation	n of Community	y Shares of Se	gment C	_	
Flows (cfs)		Caledonia	Mt. Pleasant	Racine	Total Flow
			Exist	ing	
AO401		16.53	3.05	2.21	21.78
AO394		16.53	3.05	3.17	22.74
Segment C	Average	16.53	3.05	2.69	22.26
	Existing Share	0.742	0.137	0.121	1.000
			203	0	
AO401		42.02	3.89	5.81	51.72
AO394		42.02	3.89	6.99	52.90
Segment C	Average	42.02	3.89	6.40	52.31
	2030 Share	0.803	0.074	0.122	1.000
			Incre	ase	
AO401		25.50	0.84	3.60	29.94
AO394		25.50	0.84	3.83	30.16
Segment C	Average	25.50	0.84	3.72	30.05
-	Growth Share	0.848	0.028	0.124	1.000

Calculation of Deficiency/Increased Flow Share of Cost¹⁾

							Hicreaseu	
	Existing	Existing	Excess	Design	Total	Def.	Flow	2030
Flows (cfs)	Flow	Capacity	(Deficiency)	2030	Increase	Share	Share	Share
AO401	21.78	17.86	-3.92	51.72	33.86	0.116	0.884	0.000
AO394 (2)	22.74	34.04	11.3	52.90	18.86	0.000	0.000	1.000
Segment C	22.26	25.95	3.69	52.31	26.36	0.058	0.442	0.500

Calculation of Communit	Cost	Segment C		
	Caledonia	Mt. Pleasant	Racine	Total
Deficiency Share	\$20,104	\$3,710	\$3,267	\$27,081
Growth Share	\$175,485	\$5,778	\$25,575	\$206,837
2030 Share	\$187,904	\$17,390	\$28,625	\$233,918
Total	\$383,492	\$26,877	\$57,467	\$467,836

Calculation	of Communi	ty Shares of S	legment B		
			Mt.		Total
Flows		Caledonia	Pleasant	Racine	Flow
			Exist	ing	
AO414		16.53	3.05	1.18	20.75
AO401		16.53	3.05	2.21	21.78
Segment B	Average	16.53	3.05	1.69	21.27
E	Existing Share	0.777	0.143	0.080	1.000
			203	0	
AO414		42.02	3.89	4.60	50.51
AO401		42.02	3.89	5.81	51.72
Segment B	Average	42.02	3.89	5.21	51.12
	2030 Share	0.822	0.076	0.102	1.000
			Incre	ase	
AO414		25.50	0.84	3.42	29.76
AO401		25.50	0.84	3.60	29.94
Segment B	Average	25.50	0.84	3.51	29.85
	Growth Share	0.854	0.028	0.118	1.000

Calculation of Deficiency/Increased Flow Share of $\operatorname{Cost}^{1)}$

							Increased
	Existing	Existing	Excess	Design	Total	Def.	Flow
	Flow	Capacity	(Deficiency)	2030	Increase	Share	Share
AO414	20.75	18.01	-2.74	50.51	32.50	0.084	0.916
AO401	21.78	17.86	-3.92	51.72	33.86	0.116	0.884
Segment A	21.27	17.94	-3.33	51.12	33.18	0.100	0.900

Calculation of Commun	nity Shares of	Cost	Segment B	
	Caledonia	Mt. Pleasant	Racine	Total
Deficiency Share	\$26,461	\$4,882	\$2,708	\$34,051
Growth Share	\$261,637	\$8,627	\$36,066	\$306,329
Total	\$288,098	\$13,508	\$38,774	\$340,380

Community Shares Of Total Costs

	Mt.		
Caledonia	Pleasant	Racine	Total
\$756,658	\$42,486	\$105,856	\$905,000
83.6%	4.7%	11.7%	100.0%

- $\ensuremath{^{*}}$ All costs exclude engineering and contingency costs.
- * All costs exclude engineering and contingency costs.

 1) Existing flows and capacity were determined for each segment of the sewer system. The existing flows were subtracted from existing capacity to determine the current excess or deficiency in capacity for the segment. Next, the design 2030 capacity flows were compared to the existing flows to determine the amount of capacity added by the improvements. The increased capacity is attributable to a combination of correction for deficiencies and additional flows. The percentage shares of additional capacity were used to allocate the cost of the new system improvements. The deficiency shares were allocated on the basis of current flows and the increased flow shares were allocated on the basis of increased flows through year 2020.

 2) No deficiency for 2nd half of Segment C -- allocated based upon 2030 flow.

Table 7
Racine Wastewater Utility
Buchanan Avenue Relief Sewer
Calculation of Community Shares of Capital Costs

Community	Charge	of Flores	(ofc)
COMMINICAL	onares	OI FIOWS	(CIS)

					Total
	Caledonia	Mt. Pleasant	North Park	Racine	Flow
			Existing		
Upstream	16.53	3.05	20.56	38.24	78.38
Downstream	16.53	3.05	20.56	43.41	83.55
Upstream Share	0.211	0.039	0.262	0.488	1.000
Downstream Share	0.198	0.036	0.246	0.520	1.000
			2030		
Upstream	42.03	3.88	32.20	42.86	120.98
Downstream	42.03	3.88	32.20	49.46	127.58
Upstream Share	0.347	0.032	0.266	0.354	1.000
Downstream Share	0.329	0.030	0.252	0.388	1.000
			Increase		
Upstream	25.50	0.83	11.65	4.62	42.60
Downstream	25.50	0.83	11.65	6.05	44.03
Upstream Share	0.599	0.020	0.273	0.108	1.000
Downstream Share	0.579	0.019	0.264	0.137	1.000

Calculation of Deficiency/Increased Flow Share of Cost (1)

	Existing Flow	Existing Capacity	Excess (Deficiency)	Design 2030	Total Increase	Deficiency Share	Flow Share
Upstream (2)	78.38	78.80	0.42	120.98	42.18	0.000	100.000
Downstream (3)	83.55	129.63	46.08	127.58	-2.05	0.000	0.000

Calculation of Community Shares of Cost

	Caledonia	Mt. Pleasant	North Park	Racine	Total
Community Share	\$457,290	\$14,966	\$208,859	\$82,885	\$764,000
	59.9%	2.0%	27.3%	10.8%	100.0%

- 1) Existing flows and capacity were determined for each segment of the sewer system. The existing flows were subtracted from existing capacity to determine the current excess or deficiency in capacity for the segment. Next, the design 2030 capacity flows were compared to the existing flows to determine the amount of capacity added by the improvements. The increased capacity is attributable to a combination of correction for deficiencies and additional flows. The percentage shares of additional capacity were used to allocate the cost of the new system improvements. The deficiency shares were allocated on the basis of current flows and the increased flow shares were allocated on the basis of increased flows through year 2020.
- 2) Upstream has no deficiency -- allocate all costs based upon increased 2030 upstream flow.
- 3) Downstream half has no deficiency and is adequate for 2030.

Table 8
Racine Wastewater Utility
Wastewater Storage at Caledonia
Allocation of Capital Costs

Allocation of Total Costs (1) (2)								
	Total	Racine	Mt. Pleasant	Yorkville	Caledonia	Sturtevant	North Park	Crestview
Total Cost	\$4,000,000							
Costs to Allocate on the basis of Michigan Blvd. 2030 Improvements	\$1,273,913	\$166,066	\$23,875		\$1,083,973			
Net to Allocate on basis of 2020 Increased Peak Hour Flow	\$2,726,087	\$172,978	\$1,875,212	\$180,225	\$163,314	\$27,058	\$191,821	\$115,479
Total	\$4,000,000	\$339,043	\$1,899,086	\$180,225	\$1,247,287	\$27,058	\$191,821	\$115,479

Calculation of Community Shares of Flows

Flows	Caledonia	Mt. Pleasant	Racine	Total Flow	
		Existin	ng		
Upstream	18.24	3.37	9.65	31.250	
Upstream Share	0.584	0.108	0.309	1.000	
		2030)		
Upstream	42.02	3.89	13.29	59.200	
Upstream Share	0.710	0.066	0.225	1.000	
		Increa	se		
Upstream	23.78	0.52	3.64	27.95	
Upstream Share	0.851	0.019	0.130	1.000	

Calculation of Community Shares of Cost for Michigan Blvd. 2030 Improvements

System has no deficiency and is adequate to 2030.

Allocate cost based upon 2030 increased flow.

	Caledonia	Mt. Pleasant	Racine	Total
Community Share	\$1,083,973	\$23,875	\$166,066	\$1,273,913

- 1) Cost excludes contingencies and engineering.
- 2) Construction of Caledonia Storage eliminated the need for Michigan Blvd. 2030 Improvements. A portion of the costs for storage, equal to the amount that would have been spent on Michigan Blvd. Improvements, is allocated on the same basis on which the Michigan Blvd. improvements would have been allocated. The remainder of the storage costs are allocated on the basis of 2020 Increased Peak Hour Flow.

Table 9
Racine Wastewater Utility
Capital Cost Allocation
Summary of Community Shares of Project Costs

	WWI	F	Interceptor System		Total	
	Cost	Share	Cost	Share	Cost	Share
Racine	\$21,080,729	31.5%	\$842,882	10.6%	\$21,923,612	29.3%
Mt. Pleasant	\$30,758,597	46.0%	\$2,700,022	34.0%	\$33,458,619	44.7%
Yorkville	\$2,795,073	4.2%	\$248,711	3.1%	\$3,043,784	4.1%
Caledonia	\$3,944,013	5.9%	\$3,396,504	42.8%	\$7,340,517	9.8%
Sturtevant	\$1,339,158	2.0%	\$37,340	0.5%	\$1,376,498	1.8%
North Park	\$4,801,233	7.2%	\$552,939	7.0%	\$5,354,172	7.2%
Crestview	\$2,200,434	3.3%	\$159,362	2.0%	\$2,359,795	3.2%
Total	\$66,919,236	100.0%	\$7,937,760	100.0%	\$74,856,996	100.0%

Table 10
Racine Wastewater Utility
Wastewater Treatment Capacity Allocations

	Average	Peak	Peak	Average	Average	Average	Average
	Day Flow	Day Flow	Hour Flow	Daily BOD	Daily TSS	Daily TKN	Daily P
	(mgd)	(mgd)	(mgd)	(lbs.)	(lbs.)	(lbs.)	(lbs.)
Racine (1)	17.06	90.59	109.12	15,303	19,639	2,253	442
Mount Pleasant (2)	10.18	45.77	82.93	8,363	10,732	1,231	241
Colonial Heights	0.03	0.18	0.22	27	35	4	1
Yorkville (3)	0.76	2.66	3.23	466	598	69	13
Raymond	0.15	0.54	0.66	96	123	14	3
Caledonia	1.93	8.11	10.35	2,108	2,705	310	61
Sturtevant	0.81	2.80	5.65	934	1,199	138	27
North Park (4)	2.64	8.99	13.46	3,151	4,043	464	91
Crestview	0.93	5.07	5.25	1,144	1,468	168	33
	34.49	164.71	230.87	31,592	40,542	4,651	912

^{1.} Includes Villages of North Bay and Elmwood Park, excludes Colonial Heights.

^{2.} Colonial Heights shown separately.

^{3.} Yorkville allocation split 17% to Raymond, 83% to Yorkville per 11/17/99 memo from Earth Tech.

^{4.} Includes Wind Point.

APPENDIX 2

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE RACINE PUBLIC LIBRARY

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE RACINE PUBLIC LIBRARY

The Racine Public Library, located at 75 Seventh Street, near downtown Racine, provides a variety of library services for the City of Racine and the surrounding area. Annual library circulation in recent years has been approximately one million volumes, including interlibrary loans. The majority of library loans are made to City of Racine residents, but library users come from throughout Racine County, and even from Walworth County and Kenosha County. The library is part of the Lakeshores Library System (LLS), which was established in 1983 by Racine County and Walworth County. Using state funds, the system provides, for libraries in both counties, services such as interlibrary exchange of materials, preparation of computerized card catalogs, a van for delivery services between libraries, automation, and continuing education programs. All administration and operation costs for the Lakeshores Library System are funded by the State of Wisconsin, without any contribution from Racine County or the municipalities participating in the system. The LLS offices are currently located in the Racine County Courthouse and LLS pays the County for the annual rental of this space and for payroll services provided by the County.

The LLS Board also distributes the county library tax revenues to the libraries in the system to reimburse them for providing services to residents outside their municipal boundaries. The 12 Racine County villages and towns within the system that do not have their own libraries pay the County's Special Levy for Library Services, and this money is paid to the LLS and redistributed to the libraries within the system. The library tax rate in Racine County for 1998 was \$0.21 per \$1,000 of equalized value. Under Wisconsin Statutes s. 43.64 any city, town, village or school district in the County may be exempted from the library tax if it expends funds for its own municipal library in an amount greater than or equal to the amount of its share of the prior year's county library levy. A municipality that participates in a joint public library with another municipality may also be exempted from the tax by the county. Except for the county tax levy, Racine County does not fund or directly provide any library services.

The Racine Public Library is governed by a Board of Trustees, composed of 11 members appointed by the City and the County. The nine members appointed by the City include 3 alderpersons appointed by the Mayor, 1 public member appointed by the Mayor to be his representative, 4 other public members appointed by the Mayor, and 1 public member appointed by the president of the common council. Two additional trustees are appointed by the County The Library Board's responsibilities include authorizing Library expenditures, including expenditures for land and facilities, controlling and maintaining all Library lands, buildings and property, supervising the administration of the Library, appointing a City Librarian, promoting the wider use of books and other library resources, providing an annual report to Department of Public Instruction of the condition of the Library's trust funds and other revenues, data on library materials, facilities, personnel and operations, and an evaluation of the Lakeshore Library System's operation and effectiveness, managing all donations and gifts made to the Library, and making arrangements for the exchange of materials with other libraries. The City Librarian reports to the Library Board and is in charge of the day-to-day operation of the Library and the hiring of appropriate support staff. Both the City of Racine and the County have some input in Library decision-making through their representatives and appointees to the Library Board.

Circulation

Library circulation during the last four years has been between 890,000 and 1,005,000 units per year (Table 1). The largest users of the library are the City of Racine, the Town of Caledonia, and the Town of Mount Pleasant. City of Racine residents account for approximately 55-59% of circulation, while residents of communities in Racine County without their own library account

for approximately 39-42% of circulation. Other communities in Racine County make up less than 1% of the annual circulation, and the remaining 1.5% of circulation is to residents of other counties. The percentage of circulation to Racine residents has declined slightly in recent years, while circulation to residents of Racine County without their own library has increased slightly.

Patterns of library use typically depend on a number of factors, including distance from a person's home or workplace to the library, the location and quality of other libraries, and economic and demographic factors, such as income and educational levels. All other things being equal, the utilization of a specific library is a decreasing function of the distance from a person's home to the library. Library utilization can be defined as the number of library materials used per capita on an annual basis. Table 2 shows the utilization rates for the communities in the Racine Public Library service area for 1995 through 1998. Utilization rates for each community have remained fairly constant during the last four years, although utilization varies significantly from one community to the next. As expected, communities closer to the library generally have a higher utilization rate per capita than those further away. Racine's utilization rate, however, is lower than that of any of the adjacent communities, which may be due to differences in income and educational levels. Utilization rates in adjacent communities are likely to increase in the near future with the implementation of the new Bookmobile Program.

Using the average utilization rates for the last four years and population projections for the area obtained from the Department of Administration, Table 1 shows the anticipated circulation levels for each community for 2010 and 2015. If utilization rates stay at current levels, the percentage of library use by Racine residents is expected to remain slightly below 60% of the total circulation, although it may decline slowly over time. Usage by residents of other communities in the county is expected to account for a slightly increasing share over time. These patterns could change, however, if population growth does not occur as expected, or if other libraries in the area are opened or significantly expanded. For purposes of this analysis, it is assumed that the percentage of circulation by community will remain at approximately its current level.

Current Funding

The Public Library relies on a number of different sources for operating income. Table 3 shows Library revenue by source for the last four years. Approximately 14% of income comes from a combination of fines and fees, State aid, a contract with Kenosha County, carryover from the prior year, and trust funds and gifts. The distribution of the county library tax from the Lakeshores Library System comprises another 22% of the library's annual revenues. Funding from the City of Racine makes up the majority of the Library's funding, or about 64% annually. Of the municipal funding, the City of Racine contributes approximately 74%, while the County library tax distribution supplies the other 26%.

Wisconsin Act 150, passed during the 1997-98 Legislative Session, changed the requirements for County support of public libraries. The new statute stipulates that each county that does not operate its own public library must pay each municipal library in the county for 70% of the costs of loans made to residents of the county who are not residents of a municipality with its own public library. The cost per loan is calculated as the total operating expenditures for the prior year, not including any capital expenditures or federal funding, divided by the prior year's total circulation. The cost per loan is then multiplied by the number of loans made to residents of municipalities in the county that do not operate a public library. The county will be required to pay the municipality 70% of this amount, beginning in 2001.

Table 4 shows the computation of what the 70% funding level would have been for the Racine Public Library based on circulation and expenditures for each year, 1995 through 1998. Actual county funding during this time period covered approximately 47-57% of the cost of loans to

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Racine County residents without a municipal public library. In 1998, actual county funding was approximately \$180,000 lower than the level that the County would have funded under the new statute.

As stated in the 1999 Racine County Budget, the County's goal is to eventually contribute 40% of the library's total local funding requirements. The County has been moving slowly but steadily towards this goal in the last four years, increasing its support from 21% to 26% of the total local funding share. A comparison of what the County would have funded under the new statute, 1995-1998, with the County's stated goal of funding 40% of local expenditures, shows that County funding of 40% of local expenditures would more than meet the new statutory requirements (Table 4).

Although the County funding support for the Racine Public Library has been increasing, it still falls significantly short of reimbursing the Library for services provided to non-City residents. Table 5 shows the actual level of funding provided by the City and the County over the last four years, and the level of funding that would have been provided if the City and the County provided the local funding for the Library in proportion to their percentage of circulation. As this analysis shows, the City of Racine paid an average of \$438,000 more per year under the current funding system than it would have if the County reimbursed the City in proportion to the share of circulation to non-City residents.

As the County increases its share of the Library funding, this gap will narrow in the future. However, if the share of circulation to non-City residents stays at current levels or increases slightly, County funding of 40% of the local funding will not entirely reimburse the City for the Library services it provides. Table 6 compares the funding levels that would have been achieved, 1995-1998, with 40% county funding versus funding based on actual utilization of the Library. In each year, the City would have paid slightly more under 40% funding by the County than under a use-based funding allocation.

Alternative Funding

Although the level of county funding is moving in the right direction, it may be more equitable to set an annual funding level based upon the prior year's actual circulation report. An annually revised funding rate based upon actual use would account for actual changes in population and utilization rates. Table 7 compares the actual amount of City and County funding for 1998 with the amount that would have been funded under a 40% of local share County contribution and a County contribution based on actual utilization. Increasing the County funding level to 40% would result in savings of approximately \$361,000 to the City of Racine. Raising the county funding to match the allocation of funding to actual use of the Library would result in additional county funding of approximately \$457,000, or \$96,000 more than the contribution under 40% County funding.

As shown in Table 8, either of these funding levels could be achieved with a relatively small increase in the County library tax. County funding at the 40% level would require an increase of \$.08 per \$1,000 equalized value, while funding based on actual use could be reached by increasing the tax rate by \$.10 per \$1,000 of equalized value.

If the County were to immediately increase its funding level to an amount supported by recent circulation records, then the City would be compensated for the costs of circulation to residents of other municipalities. However, according to Wisconsin Statutes s. 43.15, municipalities are required to maintain their library funding at an amount at least equal to the level of funding appropriated during the previous 3 years. This has traditionally been interpreted by the Department of Public Instruction (DPI) to apply even when funding from another source increases. However, there have been no cases in which a public library received a funding

increase of the magnitude recommended by this report. At this point, it is not certain whether the DPI would enforce this provision if the Racine Public Library were to receive a large funding increase from the county library tax. If the City were required to maintain its funding level, the City would be able to freeze its funding level, but could not decrease the amount allocated for library services. In the short run, the City would be able to offer an increased level of library services but its share of the total library funding would decrease only slightly. As library operating costs increased with inflation and the City maintained a constant funding level, the City's share of library funding would gradually decrease to a level that would be in proportion to the share of circulation to City residents. However, this process could take a number of years.

Another solution would be for the Sewer Service Area communities to make up for the County funding shortfall. Since service area communities account for 97% of total non-City circulation from the County, it would be appropriate for them to accept responsibility for making up the shortfall. Assuming that the County funding remains at its current level and that sewer service area communities reimburse the City for the shortfall according to their share of circulation contributions would be as shown in Table 9, based on 1998 data. The shortfall could be recovered through property tax increases in the range of \$.02 to \$.20 per \$1,000 of equalized value for the Racine Sewer Service Area communities. These communities would still pay the County library tax in addition to the payments to the City of Racine. This alternative may be easier to implement since it does not involve a countywide increase in the library tax.

As a fourth alternative, the municipalities surrounding Racine could develop an agreement with the City to operate a joint library. This could be accomplished through an agreement between the municipalities that would contain provisions necessary to establish a municipal library board, and would allow the library board to exercise all the powers and duties of a municipal library under Wisconsin Statutes s. 43.58. Any towns wishing to participate in the joint library would need to obtain approval from the County Board of Supervisors. The joint library board would have the same powers and duties as the existing Racine library board, but would include representatives of all of the participating municipalities in proportion to their population. Thus, all of the participating municipalities would have input into library policies and control of the library budget.

Municipalities that chose to participate in a joint library would be exempt from the County library tax, provided that they contributed at least as much to the Racine Public Library as they had contributed to the County library levy. Table 10 shows an example of the funding contribution from each municipality in the proposed joint library agreement using 1998 circulation and operating expenses. The towns of Raymond and Yorkville are excluded from this analysis since the utilization rates for these municipalities are significantly lower than those of other municipalities in the sewer service area. For the purposes of this analysis, it is assumed that the County would contribute 70% of the cost of circulation to residents of other municipalities in the County that are not part of the joint library and do not have their own municipal library, as shown in Table 11. This alternative would result in a fair allocation of costs to the sewer service area municipalities and would not require any additional county funding beyond the level required by statute. However, as with Alternative 1 and Alternative 2, the City might be required to maintain its current level of library funding. If so, it would take several years for the City's share of library funding to decrease to a level that matched its share of library circulation. In addition, this alternative would require a joint library agreement and shared control of the library among several municipalities, and the County would need to approve the participation of any towns, which in this case would be Mount Pleasant and Caledonia.

Table 12 shows a comparison of the contributions for library funding from each municipality in the Racine Sewer Service Area under each of the four alternatives, using 1998 figures. All amounts shown are the municipality's total contribution to library services, whether through a

direct contribution or the county library tax. Most municipalities, with the exception of the Town of Mount Pleasant, would contribute the least under Alternative 1 and the most under Alternative 4. Alternative 3 may be the easiest to implement, since it does not require a countywide increase in the tax rate or a change in the governing structure of the Racine Public library. A comparison of each municipality's contribution per loan, as shown in Table 13, reveals that the current funding arrangement results in significantly higher costs per checkout for City of Racine residents than for residents of surrounding municipalities. An increase in the county funding level, as in Alternative 1 or Alternative 2, would narrow the gap between the highest contribution per checkout and the lowest contribution per checkout, from \$2.50, to \$1.34 or \$1.12. However, neither of these alternatives would be entirely equitable, since contributions are based on equalized value, rather than circulation. Alternative 3 has a similar result, since a large part of each municipality's contribution would still be based on equalized value. Under Alternative 4, however, the contribution is based entirely on percentage of circulation. Therefore, each municipality pays the same cost per checkout.

Capital Costs

The County currently contributes to the annual operating costs for the Racine Public library. However, the county does not provide for any reimbursement of capital costs. Also, the statute requiring county contributions does not require reimbursement for capital costs. The City has expended considerable funds for the development of the Library and communities utilizing the facility should pay for a share of the capital costs. As the City is not required to capitalize library assets, records for the original cost of the library improvements are not readily available. The City conducted a major renovation and expansion of the library in 1992, for which the City capital costs totaled approximately \$9 million. Assuming a 40-year asset life, as of 1999 the improvements are seven years old and have a remaining life of 33 years. The annual amortization of the initial capital cost plus the interest cost over 33 years would be approximately \$556,000 per year, as shown in Table 14. This computed annual capital cost can be allocated based upon each community's share of the total sewer service area circulation. Based upon this analysis, the City should recover approximately \$240,000 per year from the surrounding communities in addition to the operating cost reimbursement.

<u>SUMMARY</u>

County funding currently falls short of reimbursing the City for circulation to other communities. Although county policy and state statutes will lead to increased county funding in the future, it is uncertain as to when the county will increase its funding to the level desired. Therefore there will be a continuing funding shortfall for an indefinite time. This shortfall relates to circulation to Eastern Racine County communities and will vary from year to year. Therefore it is recommended that the Eastern Racine County Communities adopt Alternative 3 and make an annual payment to the City to reimburse it for the shortfall between county funding and the share of cost attributable to circulation to non-residents, as computed on an annual basis. The annual payment would consist of two parts: an operating cost reimbursement for the shortfall between the actual use based cost and the county reimbursement, and a capital cost reimbursement. The payments would be based upon each community's share of circulation for the area. Sample calculations for the 1998 payments are included in Table 15. Table 15 also contains an analysis of what the operating shortfall would be after the provisions of Wisconsin Act 150 are in effect. The capital cost reimbursement would be the same for both scenarios.

Table 1
Racine Public Library
Annual Circulation, 1995-1998 and Projected Circulation, 2010 and 2015

	Circulation						
	1995	1996	1997	1998	2010	2015	
C. Racine	542,910	550,641	579,230	492,949	545,232	544,605	
Racine Co. with Library	5,368	5,762	7,117	6,304	6,971	7,303	
T. Burlington	1,096	1,360	1,548	1,729	1,545	1,580	
T. Dover	2,333	3,200	3,647	3,135	3,114	3,130	
T. Norway	803	636	252	260	536	563	
T. Raymond	6,657	6,767	8,566	7,851	6,742	6,559	
T. Waterford	331	444	758	851	591	614	
T. Yorkville	4,898	5,095	5,446	4,473	4,499	4,401	
V. Sturtevant	16,091	17,665	19,032	20,278	17,721	18,090	
T. Caledonia	155,740	164,311	180,448	171,104	178,089	182,422	
T. Mt. Pleasant	143,465	147,025	152,021	139,142	145,610	148,241	
V. Elmwood Park	5,993	5,336	5,583	4,867	5,580	5,590	
V. North Bay	3,976	3,291	3,227	3,666	4,947	5,258	
V. Wind Point	23,498	23,878	22,539	21,613	25,785	26,362	
Walworth County	614	246	896	346	568	573	
Kenosha Co. and Other	5,504	6,677	6,785	5,843	6,345	6,397	
ILL	7,646	7,472	8,464	8,747	8,239	8,306	
Total	926,923	949,806	1,005,559	893,158	962,114	969,994	

	Community Shares of Total Circulation						
_	1995	1996	1997	1998	2010	2015	
City of Racine	58.6%	58.0%	57.6%	55.2%	56.7%	56.1%	
Racine Co. With Library	0.6%	0.6%	0.7%	0.7%	0.7%	0.8%	
Racine Co. Without Library	39.4%	39.9%	40.1%	42.4%	41.0%	41.5%	
All Other	1.5%	1.5%	1.6%	1.7%	1.6%	1.6%	
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

	Community Shares of Racine County Circulation						
	1995	1996	1997	1998	2010	2015	
City of Racine	59.5%	58.9%	58.5%	56.1%	57.6%	57.0%	
Racine Co. With Library	0.6%	0.6%	0.7%	0.7%	0.7%	0.8%	
Racine Co. Without Library	40.0%	40.5%	40.7%	43.2%	41.7%	42.2%	
Total County	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Table 2
Racine Public Library
Library Utilization Rates, 1995-1998

Per Capita Utilization Rate

_	1995	1996	1997	1998	Average
V. North Bay	15.53	13.22	13.01	14.78	14.14
V. Wind Point	12.33	12.55	11.86	11.35	12.02
V. Elmwood Park	11.33	10.13	10.51	9.29	10.31
T. Caledonia	7.08	7.41	8.00	7.55	7.51
T. Mt. Pleasant	6.62	6.70	6.87	6.25	6.61
C. Racine	6.37	6.45	6.77	5.76	6.34
V. Sturtevant	3.26	3.53	3.70	3.84	3.58
T. Raymond	2.02	2.05	2.58	2.34	2.25
T. Yorkville	1.66	1.70	1.79	1.47	1.65
T. Dover	0.62	0.85	0.96	0.83	0.82
Racine Co. with Library	0.27	0.29	0.35	0.31	0.31
T. Burlington	0.18	0.22	0.25	0.28	0.24
T. Waterford	0.07	0.09	0.14	0.16	0.11
T. Norway	0.13	0.10	0.04	0.04	0.07

Note:

Library Utilization Rate expressed in terms of per capita circulation.

Table 3 Racine Public Library Revenue Sources, 1995-1998

	1995	1996	1997	1998
Total Operating Expenses	\$2,421,511	\$2,557,963	\$2,566,478	\$2,765,991
Other Revenues				
Fines and Fees	\$88,413	\$89,085	\$85,718	\$90,198
Net Current State Aid	\$150,409	\$177,020	\$216,577	\$201,383
Federal Aid	\$0	\$90	\$0	\$0
Contract Kenosha County	\$1,630	\$6,703	\$6,526	\$7,399
Prior Year Carry Forward	\$32,520	\$32,520	\$2,116	\$75,022
Trust Funds and Gifts	\$11,098	\$27,923	\$53,177	\$25,460
Total Other Revenues	\$284,070	\$333,341	\$364,114	\$399,462
Net Expense Requiring Local Funding	\$2,137,441	\$2,224,622	\$2,202,364	\$2,366,529
Local Funding				
City of Racine	\$1,696,422	\$1,833,105	\$1,844,153	\$1,862,620
Racine County	\$448,773	\$513,731	\$588,472	\$640,811
Total	\$2,145,195	\$2,346,836	\$2,432,625	\$2,503,431
Share of Total Funds by Source				
City of Racine	70%	68%	66%	64%
Racine County	18%	19%	21%	22%
Other Revenues	12%	13%	13%	14%
Total	100%	100%	100%	100%
Chouseff and Funding				
Share of Local Funding	79%	78%	76%	74%
City of Racine Racine County	79% 21%	78% 22%	76% 24%	74% 26%
Total	100%	100%	100%	100%
Total	100%	100%	100%	100%

Table 4
Racine Public Library
Comparison of Actual County Funding vs. Amount Required by Wisconsin Act 150

	1995	1996	1997	1998
Net Library Operating Expenses	\$2,421,511	\$2,557,873	\$2,566,478	\$2,765,991
Total Annual Circulation (Book Loans)	926,923	949,806	1,005,559	893,158
Expenditures Per loan	\$2.61	\$2.69	\$2.55	\$3.10
Circulation to County Residents Without Municipal Library	364,881	379,008	403,067	378,969
Cost of Circulation to County Residents Without Municipal Library	\$953,222	\$1,020,687	\$1,028,744	\$1,173,616
70% County Funding of Non-Resident Circulation	\$667,255	\$714,481	\$720,121	\$821,531
Actual County Funding	\$448,773	\$513,731	\$588,472	\$640,811
Percentage of Non-Resident Circulation Costs	47.1%	50.3%	57.2%	54.6%
40% County Funding of Local Share of Library Expenditures	\$858,078	\$903,100	\$938,763	\$965,293
Difference Actual Funding vs. 70% of Non-Resident Circulation	-\$218,482	-\$200,750	-\$131,649	-\$180,720
Difference 40% of Local Share vs. 70% of Non-Resident Circulation	\$190,823	\$188,620	\$218,642	\$143,762

Table 5
Racine Public Library
Comparison of Revenue from Local Sources--Actual Funding vs. Funding Based on Use

	199:	5	1990	6	199′	7	1998	8	Average
	Actual	Percent	Actual	Percent	Actual	Percent	Actual	Percent	Actual
City of Racine	\$1,696,422	79%	\$1,833,105	78%	\$1,844,153	76%	\$1,862,620	74%	\$1,809,075
County	\$448,773	21%	\$513,731	22%	\$588,472	24%	\$640,811	26%	\$547,947
-	\$2,145,195	100%	\$2,346,836	100%	\$2,432,625	100%	\$2,503,431	100%	\$2,357,022
City of Racine County	Use Based \$1,275,405 \$869,790 \$2,145,195	Percent 59% 41% 100%	Use Based \$1,381,493 \$965,343 \$2,346,836	Percent 59% 41% 100%	Use Based \$1,424,125 \$1,008,500 \$2,432,625	Percent 59% 41% 100%	Use Based \$1,405,184 \$1,098,247 \$2,503,431	Percent 56% 44% 100%	Use Based \$1,371,552 \$985,470 \$2,357,022
City of Racine	Difference \$421,017		Difference \$451,612		Difference \$420,028		Difference \$457,436		Difference \$437,523

Table 6
Racine Public Library
Comparison of Local Funding Options--40% County Funding vs. Funding Based on Use

40% County Funding

	1995	1996	1997	1998
City of Racine	\$1,287,117	\$1,408,102	\$1,459,575	\$1,502,059
County	\$858,078	\$938,734	\$973,050	\$1,001,372
•	\$2,145,195	\$2,346,836	\$2,432,625	\$2,503,431
		Use Based	Funding	
	1995	1996	1997	1998
City of Racine	\$1,275,405	\$1,381,493	\$1,424,125	\$1,405,184
County	\$869,790	\$965,343	\$1,008,500	\$1,098,247
	\$2,145,195	\$2,346,836	\$2,432,625	\$2,503,431
Difference	\$11,712	\$26,608	\$35,450	\$96,874

Table 7
Racine Public Library
Comparison of Alternative 1 and Alternative 2 for Allocating Local Funding, 1998

	A -41 1000	Alterna	ative 1	Alterna	tive 2
	Actual 1998 Funding	Funding	Difference	 Funding	Difference
City of Racine	\$1,862,620	\$1,502,059	-\$360,561	\$1,405,184	-\$457,436
County	\$640,811	\$1,001,372	\$360,561	\$1,098,247	\$457,436
	\$2,503,431	\$2,503,431	\$0	\$2,503,431	\$0

Alternative 1: County increases funding to 40% of total local funding requirements.

Alternative 2: County increases funding to a percentage of total local funding requirements equal to the percentage of circulation to non-residents of the City of Racine.

Table 8
Racine Public Library
County Library Tax Increases Needed to Reach 40% and 42% County Funding

			Additional		Additional	
			Library Tax to		Library Tax to	
	40	1998 Library	Reach 40%	Amount	Fund Based on	Amount
	Total EV 1998 (1)	Tax Rate	Funding	Generated	Use	Generated
T. Burlington	\$355,290,900	\$0.21	\$0.08	\$27,465	\$0.098	\$34,845
T. Caledonia	\$1,126,897,800	\$0.21	\$0.08	\$87,114	\$0.098	\$110,519
T. Dover	\$186,292,300	\$0.21	\$0.08	\$14,401	\$0.098	\$18,270
T. Mt. Pleasant	\$1,340,313,000	\$0.21	\$0.08	\$103,612	\$0.098	\$131,450
T. Norway	\$421,385,800	\$0.21	\$0.08	\$32,575	\$0.098	\$41,327
T. Raymond	\$225,155,000	\$0.21	\$0.08	\$17,405	\$0.098	\$22,082
T. Waterford	\$353,998,400	\$0.21	\$0.08	\$27,366	\$0.098	\$34,718
T. Yorkville	\$231,288,000	\$0.21	\$0.08	\$17,880	\$0.098	\$22,683
V. Elmwood Park	\$30,039,600	\$0.21	\$0.08	\$2,322	\$0.098	\$2,946
V. North Bay	\$22,390,200	\$0.21	\$0.08	\$1,731	\$0.098	\$2,196
V. Sturtevant	\$199,790,800	\$0.21	\$0.08	\$15,445	\$0.098	\$19,594
V. Wind Point	\$171,348,200	\$0.21	\$0.08	\$13,246	\$0.098	\$16,805
Total	\$4,664,190,000			\$360,561		\$457,436

Sources:

1. Wisconsin DOR Beginning of Year Equalized Values

Table 9
Racine Public Library
Alternative 3: Sewer Communities Share Library Funding Shortfall

Share of Sewer Service

		sewer service			
	1998	Area	Share of Shortfall		Tax Rate Increase
_	Circulation	Circulation	(2)	Total EV 1998 (1)	per \$1,000 E.V.
T. Caledonia	171,104	45.87%	\$209,840	\$1,126,897,800	\$0.186
T. Mt. Pleasant	139,142	37.30%	\$170,642	\$1,340,313,000	\$0.127
T. Raymond	7,851	2.10%	\$9,628	\$225,155,000	\$0.043
T. Yorkville	4,473	1.20%	\$5,486	\$231,288,000	\$0.024
V. Elmwood Park	4,867	1.30%	\$5,969	\$30,039,600	\$0.199
V. North Bay	3,666	0.98%	\$4,496	\$22,390,200	\$0.201
V. Sturtevant	20,278	5.44%	\$24,869	\$199,790,800	\$0.124
V. Wind Point	21,613	5.79%	\$26,506	\$171,348,200	\$0.155
Total	372,994	100.00%	\$457,436	\$3,347,222,600	

- 1. Wisconsin Dept. of Revenue beginning of year Equalized Values.
- 2. Community share of 1998 county funding shortfall

Table 10
Racine Public Library
Alternative 4: Local Funding Contribution from Municipalities in Joint Library Agreement

		Share of			Required
		Participating	Use-Based		Contribution
	1998	Municipalities'	Share of	1998 Actual	for Joint
Municipality	Circulation	Circulation	Funding	Contribution (1)	Library (2)
C. Racine	492,949	57.7%	\$1,422,777	\$1,862,620	\$1,422,777
T. Caledonia	171,104	20.0%	\$493,850	\$236,649	\$493,850
T. Mt. Pleasant	139,142	16.3%	\$401,599	\$281,466	\$401,599
V. Elmwood Park	4,867	0.6%	\$14,047	\$6,308	\$14,047
V. North Bay	3,666	0.4%	\$10,581	\$4,702	\$10,581
V. Sturtevant	20,278	2.4%	\$58,527	\$41,956	\$58,527
V. Wind Point	21,613	2.5%	\$62,381	\$35,983	\$62,381
Total	853,619	100.0%	\$2,463,762	\$2,469,684	\$2,463,762

- 1) Based on 1998 equalized value and the 1998 county library tax rate of \$0.21 per \$1,000 EV.
- 1) In order to be exempt from the county library tax under Wisconsin Statutes s. 43.64, the other municipalities would be required to contribute an amount that is at least equal to the prior year's county library tax times the current year's equalized value. It is not certain whether the City of Racine would be allowed to reduce its annual contribution for library services if it received a large increase in funding from other sources.

Table 11 Racine Public Library Joint Library Local Funding Summary

	1998
	Operating
County Funding	Costs
1998 Expenditure per Loan	\$3.10
Circulation to Other County Residents w/o Library	18,299
Total Cost of Loans to Other County Res. w/o Library	\$56,670
Minimum County Payment	\$39,669
Funding from Municipalities Participating in Joint Library	\$2,463,762
Total Local Library Funding	\$2,503,431

Table 12
Racine Public Library
Comparison of Municipal Contributions Under Funding Alternatives

1998 Actual

Municipality	1998 EV	Contribution (1)	Alternative 1 (3)	Alternative 2 (3)	Alternative 3 (3)	Alternative 4 (3)
C. Racine	\$2,459,986,100	\$1,862,620	\$1,502,059	\$1,405,184	\$1,371,552	\$1,422,777
T. Caledonia	\$1,126,897,800	\$236,649	\$315,531	\$338,069	\$446,489	\$493,850
T. Mt. Pleasant	\$1,340,313,000	\$281,466	\$375,288	\$402,094	\$452,108	\$401,599
T. Raymond (2)	\$225,155,000	\$47,283	\$63,043	\$67,547	\$56,911	\$47,283
T. Yorkville (2)	\$231,288,000	\$48,570	\$64,761	\$69,386	\$54,056	\$48,570
V. Elmwood Park	\$30,039,600	\$6,308	\$8,411	\$9,012	\$12,277	\$14,047
V. North Bay	\$22,390,200	\$4,702	\$6,269	\$6,717	\$9,198	\$10,581
V. Sturtevant	\$199,790,800	\$41,956	\$55,941	\$59,937	\$66,825	\$58,527
V. Wind Point	\$171,348,200	\$35,983	\$47,977	\$51,404	\$62,489	\$62,381

Alternative 1: Racine County increases its funding level to 40% of the locally-funded costs.

Alternative 2: Racine County increases its funding level to cover a percentage of locally-funded costs equal to the percentage of circulation to non-residents.

Alternative 3: County funding remains at its current level and Racine Sewer Service Area municipalities fund the shortfall to the City of Racine based on their share of the total Sewer Service Area circulation.

Alternative 4: Racine Sewer Service Area municipalities, except the Towns of Raymond and Yorkville, participate in a joint library with the City of Racine.

- 1) Contributions for municipalities other than the City of Racine are based on the 1998 library tax rate of \$0.21 per \$1,000 of equalized value.
- 2) Contributions from the Towns of Raymond and Yorkville under Alternative 4 would depend on the County library tax necessary to fund 70% of circulation costs to county residents without a municipal library. Therefore, this amount cannot be calculated without detailed circulation records and budgets from all libraries in the county. It was assumed that county library taxes will be at or above current levels.
- 3) Includes contribution through the county library tax if any

Table 13
Racine Public Library
Comparison of Municipal Contributions per Loan Under Funding Alternatives, 1998

	1998 Actual				
Municipality	Contribution	Alternative 1	Alternative 2	Alternative 3	Alternative 4
C. Racine	\$3.78	\$3.05	\$2.85	\$2.78	\$2.89
T. Caledonia	\$1.38	\$1.84	\$1.98	\$2.61	\$2.89
T. Mt. Pleasant	\$2.02	\$2.70	\$2.89	\$3.25	\$2.89
V. Elmwood Park	\$1.30	\$1.73	\$1.85	\$2.52	\$2.89
V. North Bay	\$1.28	\$1.71	\$1.83	\$2.51	\$2.89
V. Sturtevant	\$2.07	\$2.76	\$2.96	\$3.30	\$2.89
V. Wind Point	\$1.66	\$2.22	\$2.38	\$2.89	\$2.89

Alternative 1: Racine County increases its funding level to 40% of the locally-funded costs.

Alternative 2: Racine County increases its funding level to cover a percentage of locally-funded costs equal to the percentage of circulation to non-residents.

Alternative 3: County funding remains at its current level and Racine Sewer Service Area municipalities fund the shortfall to the City of Racine based on their share of the total Sewer Service Area equalized value.

Alternative 4: Racine Sewer Service Area municipalities, except the Towns of Raymond and Yorkville, participate in a joint library with the City of Racine.

Note: Contributions per loan are not shown for the Town of Raymond and the Town of Yorkville because these municipalities have a much lower rate of use per capita for the Racine Public Library, indicating that their residents may make significant use of other libraries. If this is the case, then a portion of their county library tax contribution is used to fund other libraries.

Table 14
Racine Public Library
Capital Cost Allocation

			Annual Capital
	1998 Circulation	Share	Charge
T. Raymond	7,851	0.9%	\$5,041
T. Yorkville	4,473	0.5%	\$2,872
V. Sturtevant	20,278	2.3%	\$13,020
T. Caledonia	171,104	19.8%	\$109,859
T. Mt. Pleasant	139,142	16.1%	\$89,337
V. Elmwood Park	4,867	0.6%	\$3,125
V. North Bay	3,666	0.4%	\$2,354
V. Wind Point	21,613	2.5%	\$13,877
Subtotal	372,994	43.1%	\$239,484
C. Racine	492,949	56.9%	\$316,502
Total	865,943	100%	\$555,986

Total Capital Costs (1) \$8,897,200

Annual Amortization of Balance @ 5% (2) \$555,986

- 1) Capital costs for 1992 library structure upgrade and expansion.
- 2) Assumes 33 years remaining asset life.

Table 15
Racine Public Library
Calculation of Community Payment for Library Funding: Alternative 3

1998 Actual

		% of Sewer			
	1998	Service Area	1998 Operating	Capital Cost	
	Circulation	Circulation	Shortfall Share	Share	Total
T. Caledonia	171,104	45.9%	\$209,840	\$109,859	\$319,699
T. Mt. Pleasant	139,142	37.3%	\$170,642	\$89,337	\$259,980
T. Raymond	7,851	2.1%	\$9,628	\$5,041	\$14,669
T. Yorkville	4,473	1.2%	\$5,486	\$2,872	\$8,358
V. Elmwood Park	4,867	1.3%	\$5,969	\$3,125	\$9,094
V. North Bay	3,666	1.0%	\$4,496	\$2,354	\$6,850
V. Sturtevant	20,278	5.4%	\$24,869	\$13,020	\$37,888
V. Wind Point	21,613	5.8%	\$26,506	\$13,877	\$40,383
Subtotal	372,994	100.0%	\$457,436	\$239,484	\$696,920
C. Racine	492,949	0.0%			
Total	865,943	100%			

1998 With 70% Rule

		% of Sewer			
	1998	Service Area	1998 Operating	Capital Cost	
	Circulation	Circulation	Shortfall Share (1)	Share	Total
T. Raymond	7,851	2.1%	\$5,824	\$5,041	\$10,865
T. Yorkville	4,473	1.2%	\$3,318	\$2,872	\$6,190
V. Sturtevant	20,278	5.4%	\$15,044	\$13,020	\$28,063
T. Caledonia	171,104	45.9%	\$126,938	\$109,859	\$236,797
T. Mt. Pleasant	139,142	37.3%	\$103,226	\$89,337	\$192,563
V. Elmwood Park	4,867	1.3%	\$3,611	\$3,125	\$6,736
V. North Bay	3,666	1.0%	\$2,720	\$2,354	\$5,074
V. Wind Point	21,613	5.8%	\$16,034	\$13,877	\$29,911
Subtotal	372,994	100.0%	\$276,715	\$239,484	\$516,199
C. Racine	492,949	0.0%			
Total	865,943	100%			

Notes:

1) Operating shortfall assumes that the County would fund 70% of the costs of all circulation to residents of municipallities without a municipal library, as shown in Table 4.

Appendix 1 Racine Public Library Annual Report - Financial Information

	1995	1996	1997	1998
Operating Income 1. Local Govt Appropriations (Gross) Fines and Fees Racine County Local Govt Appropriations (Net)	\$2,163,248 \$88,413 \$290,000 \$1,784,835	\$2,242,190 \$89,085 \$320,000 \$1,833,105	\$2,289,871 \$85,718 \$360,000 \$1,844,153	\$2,325,818 \$90,198 \$373,000 \$1,862,620
2. County Appropriations	\$448,773	\$513,731	\$588,472	\$640,811
3. State ILL/REF Processing Prior Year Subtotal	\$143,575 \$6,834 \$150,409	\$154,154 \$22,866 \$177,020	\$136,500 \$17,561 \$62,516 \$216,577	\$156,536 \$1,667 \$43,180 \$201,383
4. Federal Lakeshore Reimb. for Intern	et	\$90		
5. Contract Kenosha County	\$1,630	\$6,703	\$6,526	\$7,399
6. Prior Year Carry Forward	\$32,520	\$32,520	\$2,116	\$75,022
7. Trust Funds and Gift to Extent of Expend	1. \$11,098	\$27,923	\$53,177	\$25,460
8. Total	\$2,429,265	\$2,591,092	\$2,711,021	\$2,812,695
Operating Expenditures				
Salaries and Wages	\$1,406,996	\$1,378,271	\$1,411,931	\$1,436,039
2. Employee Benefits	\$303,375	\$443,487	\$449,450	\$372,270
3. Collection Expenditures	\$340,598	\$347,454	\$402,163	\$386,312
4. Contracts for Services	\$0	\$0	\$0	\$0
5. Other Operating Expenses	\$370,542	\$388,751	\$302,934	\$571,370
6. Total Operating Expenses	\$2,421,511	\$2,557,963	\$2,566,478	\$2,765,991
Net Income	\$7,754	\$33,129	\$144,543	\$46,704

APPENDIX 3

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE RACINE ZOOLOGICAL GARDENS

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE RACINE ZOOLOGICAL GARDENS

The City of Racine is home to the Racine Zoological Gardens which is one of the few remaining free admission zoos in the country. The Zoo is located on a 32-acre lakefront site on the north side of downtown Racine. The Zoo was founded in 1923 and is a popular recreation facility for families with small children from Racine and Kenosha Counties. A 1997 survey of zoo visitors revealed that City of Racine residents account for approximately 31% of all visitors, while residents from the rest of the county make up 14% of visitors, and the remaining 55% of visitors come from outside Racine County or did not answer the residence question (Table 1). Since more than two-thirds of the zoo visitors come from outside the City of Racine, the 1997 survey concluded that there is a clear case for financial support for the Zoo from outside the City of Racine.

The City of Racine owns the site on which the Zoo is located, but the Zoo is managed and operated by the Racine Zoological Society. The Zoological Society selects from among its members a Board of Directors, with the President of the Society serving as the Chair of the Board of Directors. The Board of Directors is charged with setting overall policies for the operation of the Zoo, determining the goals and objectives of the Zoological Society, serving as the trustees of Zoological Society funds and trusts, authorizing the establishment of programs and the expenditure of funds, evaluating the Zoo's operation on an annual basis, and serving as the legal entity for the Zoo. The Board appoints the Zoo's Executive Director, who oversees the day-to-day operation of the Zoo and hires other staff as necessary. The Executive Director reports primarily to the President, but also attends Board meetings. Since the City of Racine owns the zoo site, the Zoological Society needs approval from the Common Council for major policy changes, such as changes in the hours of operation or charging an admission fee. However, the City is not actively involved in the management of the Zoo.

Current Funding

Operating revenues for the Zoo come from many sources, including donations, special events, memberships, concessions, vending operation and gift shop sales. Since the Zoo offers free admission, the operating revenues are not sufficient to fund the operating expenses. Table 2 shows the estimated operating expenses and revenue sources for 1998 and 1999. Budgeted operating expenses for 1998 and 1999 were \$871,103 and \$892,446 respectively. As shown, operating revenues cover less than 40% of total operating expenses. For the 1998 and 1999 budgets, operating revenues fall short of meeting operating expenses by approximately \$575,000 per year. Therefore the Zoo requires annual governmental contributions in order to maintain its free admission policy. The City of Racine and Racine County are currently providing annual subsidies totaling \$575,000 to make up for the revenue shortfalls. The City of Racine currently contributes \$475,000 annually, which equals approximately 83% of the total local governmental subsidies as shown in Table 3. Racine County has budgeted a \$100,000 contribution for 1999 that will account for 17% of the total subsidies.

In addition to its direct subsidy to the Zoo, the City of Racine also contributes to the County subsidy through county taxes paid by City residents. Table 3 shows the actual total contribution paid by City of Racine residents in 1998. The City of Racine accounted for 30% of the equalized value of all Racine County property in 1998. Therefore City property taxpayers contributed \$30,375 or approximately 30% of the County's subsidy for the Zoo in 1998. This means that the actual total subsidy paid by the City of Racine amounted to \$505,375, while residents throughout

1

¹ "Visitor Trac Spring Research Wave 1997", prepared for the Racine Zoological Society by New Venture Research, July 31, 1997.

the rest of the county contributed a total of \$69,625. Thus, Racine residents currently pay approximately 88% of the total annual subsidy needed to operate the Zoo.

Alternative Funding

Since the Zoo is a regional facility shared by residents throughout the County, it may be more equitable for other municipalities in the County to cover a larger portion of the zoo subsidy. Several alternative funding options could be developed to reduce the existing inequity. One option, Alternative 1, would be for Racine County to provide the total \$575,000 annual subsidy necessary to maintain the Zoo's free admission status. Under this arrangement, residents of each municipality would contribute to the Zoo through county property taxes and the percentage of the subsidy paid by each municipality would be equal to that municipality's share of the County's total equalized property values. Table 4 shows the share of a 100% Racine County zoo subsidy that would be paid by each municipality based on 1998 equalized values. The table also shows the amount that each municipality contributed in 1998 under the current subsidy plan. The final column indicates the difference between each community's contribution amount under a total county subsidy and that under the current arrangement.

As this analysis indicates, except for the City of Racine, all municipalities in the county are contributing substantially less than they would if the County were to fund the entire zoo subsidy. Considering 1998 equalized values, Racine should pay approximately \$175,000, or \$330,000 less than its total current contribution. Since the Zoo is a regional facility providing a unique free recreational opportunity for area residents, County financing of the required annual total subsidy would provide a fair method for sharing this cost among area municipalities. This option would require a countywide property tax increase of \$.0586 per \$1,000 of equalized value but would allow for a \$.1931 per \$1,000 reduction in the City of Racine property tax rates for a net decrease to Racine taxpayers of \$.1344 per \$1,000 of equalized value as shown in Table 8.

Given that a county wide solution may be difficult to implement, another option, Alternative 2, would be for communities in the Racine Sewer Service Area to share in Racine's direct \$475,000 annual zoo subsidy on the basis of equalized property values. The municipalities in the sewer service area are in eastern Racine County, in relatively close proximity to the City, and therefore probably have residents who use the Zoo more frequently than municipalities of western Racine County. Under this plan, the County would continue to contribute \$100,000 annually and the sewer service area communities would provide an additional \$475,000 annually according to the schedule in Table 5. As shown in the table, if each sewer service area community would share in the current Racine direct subsidy on the basis of equalized value, the City would contribute approximately \$275,000 less than under the current arrangement.

Should the County discontinue its current annual contribution to the Zoo, then a third option, Alternative 3, would be for the eastern Racine County municipalities to share in the entire \$575,000 annual subsidy on the basis of equalized values as shown in Table 6. This would result in the eastern Racine County communities paying a combined total of an additional \$28,000 annually due to the loss of \$100,000 in funding from the County.

Other funding options could also be considered. The County could seek participation from Kenosha County. The Zoo could also change its free admission policy and begin charging admission fees to some or all visitors. However, the options presented in this analysis assume that it is the desire of local officials that the Zoo continue to operate as a free admission facility and that the ultimate funding solution is likely to involve only Racine County communities.

8036001.100

Capital Cost

The preceding analysis includes only expenditures for operation and maintenance of the Zoo and does not include any allocation of the capital costs contributed by the City for the land and facilities used by the Zoo. Over the years, the City has expended funds for capital improvements to the Zoo and communities utilizing the facility should pay for a share of the capital costs. However, as the City is not required to capitalize zoo assets, records for the cost of the zoo improvements are not readily available. Also, the Zoological Society does not have records relating to capital costs for the Zoo. The only estimate available for the value of zoo facilities was found in the insured property listing provided by the City Finance Director. The zoo facilities are insured for \$4,250,000 and this figure may serve as a proxy for the actual cost of zoo facilities. However some part of the zoo improvements may have been funded by grants and individual contributions, but due to the unavailability of records, these amounts are unknown. For purposes of this report, it is assumed that the amount of the City's capital contribution cannot be obtained at this time. Therefore, only operation and maintenance costs were included in the cost sharing analysis. However, if the City were able to obtain records of capital expenditures at some time in the future, it would be possible to develop an allocation method for the sharing of capital costs.

Summary

In summary, the City of Racine is currently providing the majority of the subsidy to operate the Racine Zoological Gardens which is a facility that benefits both City of Racine residents and those residing outside the city limits. The Zoo offers free admission to all persons regardless of residence. It may be more equitable for area communities to take on a larger share of the subsidy required for the Zoo to continue as a free recreational facility. Three alternatives have been presented which would spread the burden of the zoo subsidy over a wider base and relieve the City of providing the lion's share of a subsidy which benefits residents of the entire region. A comparison of community contributions under the alternative zoo funding plans is presented in Table 7 with the impact on county and local tax rates shown in Table 8. Table 9 shows the impact of the alternatives on contributions from communities in the Racine Sewer Service Area, and Table 10 shows the total property tax contribution to the Zoo for a \$125,000 house under each of the alternatives. The proposed funding alternatives would result in relatively small increases in property taxes for participating communities but would provide a significant saving to the City of Racine and a more equitable sharing of the costs of providing the regional benefits of the Zoo. It is recommended that the Racine Sewer Service Area communities reimburse the City of Racine for the \$475,000 subsidy as shown in alternative Three in Table 9. Payment to the City would be as shown in Table 5.

As part of any change to either increase the County's participation in the funding for the Zoo or implement the additional funding by the sewer service area communities, the management and governance of the Zoo may need to be reviewed. This would be particularly important in the case of future capital expenditures and any expansion of the facilities.

Table 1 Racine Zoological Gardens Residence of Zoo Visitors, 1997

	Percent of
Municipality	Visitors, 1997
City of Racine	31%
Town of Caledonia	9%
Town of Mount Pleasant	4%
Other Racine County	1%
City of Kenosha	8%
City of South Milwaukee	6%
All Others	36%
No Answer	5%
Total	100%

Source: "Visitor Trac Fall Research Wave 1997",

New Venture Research

Table 2 Racine Zoological Gardens Operating Budgets, 1998 & 1999

	1998	1999
Operating Revenues (1)	\$296,230	\$324,165
Operating Expenses	\$548,796	\$570,750
Administrative Expenses	\$322,307	\$321,696
Total Operating Expenses	\$871,103	\$892,446
Operating Revenue as Percentage of Expenses Subtotal (shortfall before subsidies)	34% (\$574,873)	36% (\$568,281)
City Contribution	\$475,000	\$475,000
County Contribution	\$100,000	\$100,000
Total Contributions	\$575,000	\$575,000
Net Operating Income	\$127	\$6,719

¹⁾ Budgeted revenue from all sources excluding local government contributions.

Table 3
Racine Zoological Gardens
1998 Subsidy from the City and County of Racine

	Subsidy	Share
City of Racine Subsidy	\$475,000	83%
Racine County Subsidy	\$100,000	17%
Total City/County Subsidy	\$575,000	100%
Racine Share of County Subsidy (1)	\$30,375	30%
Other County Share	\$69,625	70%
Total County	\$100,000	100%
Net City Subsidy	\$505,375	88%
Net County Subsidy	\$69,625	12%
Total Subsidy	\$575,000	100%

Notes:

1) Contributions of Racine residents through County taxes, based on Racine's share of total county equalized property values.

Table 4
Racine Zoological Gardens
Municipal Share of Subsidy Under Current Plan vs. 100 Percent (\$575,000) County Subsidy, 1998

	Total Equalized		Share of \$575,000	Current Share	
Municipality	Value 1998 (1)	% 1998	County Subsidy (2)	(3)	Difference (4)
T. Burlington	\$355,290,900	4.4%	\$25,225	\$4,387	\$20,838
T. Caledonia	\$1,126,897,800	13.9%	\$80,007	\$13,914	\$66,093
T. Dover	\$186,292,300	2.3%	\$13,226	\$2,300	\$10,926
T. Mt. Pleasant	\$1,340,313,000	16.5%	\$95,159	\$16,549	\$78,610
T. Norway	\$421,385,800	5.2%	\$29,917	\$5,203	\$24,714
T. Raymond	\$225,155,000	2.8%	\$15,986	\$2,780	\$13,206
T. Rochester	\$123,683,700	1.5%	\$8,781	\$1,527	\$7,254
T. Waterford	\$353,998,400	4.4%	\$25,133	\$4,371	\$20,762
T. Yorkville	\$231,288,000	2.9%	\$16,421	\$2,856	\$13,565
V. Elmwood Park	\$30,039,600	0.4%	\$2,133	\$371	\$1,762
V. North Bay	\$22,390,200	0.3%	\$1,590	\$276	\$1,314
V. Rochester	\$43,137,300	0.5%	\$3,063	\$533	\$2,530
V. Sturtevant	\$199,790,800	2.5%	\$14,185	\$2,467	\$11,718
V. Union Grove	\$158,190,700	2.0%	\$11,231	\$1,953	\$9,278
V. Waterford	\$164,152,200	2.0%	\$11,654	\$2,027	\$9,627
V. Wind Point	\$171,348,200	2.1%	\$12,165	\$2,116	\$10,049
C. Burlinton	\$485,496,300	6.0%	\$34,469	\$5,995	\$28,474
C. Racine	\$2,459,986,100	30.4%	\$174,655	\$505,375	-\$330,720
Total	\$8,098,836,300	100.0%	\$575,000	\$575,000	\$0

- 1. Wisconsin Dept. of Revenue beginning of year Equalized Values.
- 2. Community share if the total subsidy comes from the County.
- 3. Current share paid of City and/or County subsidy. City share includes City subsidy plus contributions to the County subsidy through County taxes.
- 4. Difference between community shares under total county subsidy and the current plan.

Table 5
Racine Zoological Gardens
Municipal Share of Subsidy Under Current Plan vs. \$475,000 Eastern Racine County Service Area Subsidy (\$100,000 County Contribution)

	Total Equalized		Share of \$475,000 E. Racine Co.	Share of \$100,000 County	Total	Current	
Municipality	Value 1998 (1)	%	Subsidy (2)	Subsidy (3)	Proposed	Share (4)	Difference (5)
T. Caledonia	\$1,126,897,800	19.4%	\$92,174	\$13,914	\$106,088	\$13,914	\$92,174
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$109,631	\$16,549	\$126,180	\$16,549	\$109,631
T. Raymond	\$225,155,000	3.9%	\$18,417	\$2,780	\$21,197	\$2,780	\$18,417
T. Yorkville	\$231,288,000	4.0%	\$18,918	\$2,856	\$21,774	\$2,856	\$18,918
V. Elmwood Park	\$30,039,600	0.5%	\$2,457	\$371	\$2,828	\$371	\$2,457
V. North Bay	\$22,390,200	0.4%	\$1,831	\$276	\$2,107	\$276	\$1,831
V. Sturtevant	\$199,790,800	3.4%	\$16,342	\$2,467	\$18,809	\$2,467	\$16,342
V. Wind Point	\$171,348,200	3.0%	\$14,015	\$2,116	\$16,131	\$2,116	\$14,015
C. Racine	\$2,459,986,100	42.4%	\$201,215	\$30,375	\$231,590	\$505,375	-\$273,785
Total	\$5,807,208,700	100.0%	\$475,000	\$71,704	\$546,704	\$546,704	\$0

- 1. Wisconsin Dept. of Revenue beginning of year Equalized Values.
- 2. Community share if \$475,000 of the annual subsidy comes from regional sewer customers in Eastern Racine County based on community share of the area's equalized value.
- 3. Current share of county subsidy.
- 4. Current share paid of City and/or County subsidy. City share includes City subsidy plus contributions to the County subsidy through County taxes.
- 5. Difference between community shares under Eastern Racine County Service Area subsidy and the current plan.

Table 6
Racine Zoological Gardens
Municipal Share of Subsidy Under Current Plan vs. \$575,000 Eastern Racine Co. Service Area Subsidy (No County Contribution)

			Share of \$575,000		
	Total Equalized		E. Racine Co.		
Municipality	Value 1998 (1)	Percent	Subsidy (2)	Current Share (3)	Difference (4)
T. Caledonia	\$1,126,897,800	19.4%	\$111,580	\$13,914	\$97,666
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$132,711	\$16,549	\$116,162
T. Raymond	\$225,155,000	3.9%	\$22,294	\$2,780	\$19,514
T. Yorkville	\$231,288,000	4.0%	\$22,901	\$2,856	\$20,045
V. Elmwood Park	\$30,039,600	0.5%	\$2,974	\$371	\$2,603
V. North Bay	\$22,390,200	0.4%	\$2,217	\$276	\$1,941
V. Sturtevant	\$199,790,800	3.4%	\$19,782	\$2,467	\$17,315
V. Wind Point	\$171,348,200	3.0%	\$16,966	\$2,116	\$14,850
C. Racine	\$2,459,986,100	42.4%	\$243,575	\$505,375	-\$261,800
Total	\$5,807,208,700	100.0%	\$575,000	\$546,704	\$28,296

- 1. Wisconsin DOR beginning of year Equalized Values.
- 2. Community share if the total subsidy comes from regional sewer customers in Eastern Racine County based on community share of the area's equalized value.
- 3. Current share paid of City and/or County subsidy. City share includes City subsidy plus contributions to the County subsidy through County taxes.
- 4. Difference between community shares under Eastern Racine County Service Area subsidy and the current plan.

Table 7
Racine Zoological Gardens
Comparison of Community Contributions Under Alternative Funding Plans

			Alternative	Alternatve
Municipality	(1)	One (2)	Two (3)	Three (4)
T. Burlington	\$4,387	\$25,225	\$4,387	\$0
T. Caledonia	\$13,914	\$80,007	\$106,088	\$111,580
T. Dover	\$2,300	\$13,226	\$2,300	\$0
T. Mt. Pleasant	\$16,549	\$95,159	\$126,180	\$132,711
T. Norway	\$5,203	\$29,917	\$5,203	\$0
T. Raymond	\$2,780	\$15,986	\$21,197	\$22,294
T. Rochester	\$1,527	\$8,781	\$1,527	\$0
T. Waterford	\$4,371	\$25,133	\$4,371	\$0
T. Yorkville	\$2,856	\$16,421	\$21,774	\$22,901
V. Elmwood Park	\$371	\$2,133	\$2,828	\$2,974
V. North Bay	\$276	\$1,590	\$2,107	\$2,217
V. Rochester	\$533	\$3,063	\$533	\$0
V. Sturtevant	\$2,467	\$14,185	\$18,809	\$19,782
V. Union Grove	\$1,953	\$11,231	\$1,953	\$0
V. Waterford	\$2,027	\$11,654	\$2,027	\$0
V. Wind Point	\$2,116	\$12,165	\$16,131	\$16,966
C. Burlington	\$5,995	\$34,469	\$5,995	\$0
C. Racine	\$505,375	\$174,655	\$231,590	\$243,575
Total	\$575,000	\$575,000	\$575,000	\$575,000

- 1. Current plan with \$100,000 from County and \$475,000 from City of Racine.
- 2. Racine County provides \$575,000 annual subsidy.
- 3. Racine County continues to contribute \$100,000 per year and \$475,000 is paid by eastern Racine County communities. Contribution includes share of \$100,000 County subsidy.
- 4. County discontinues its contribution and the total \$575,000 annual subsidy is funded by eastern Racine County communities.

Table 8
Racine Zoological Gardens
Tax Effects of Alternative Zoo Funding Plans--Change in Property Tax Rates per \$1,000 of Equalized Value (Net Change in Combined County and Local Rates)

	Total 1998	Current Tax	Current	Alternative	Alternative	Alternative
Municipality	Equalized Value	Rate (1)	Plan (2)	One (3)	Two (4)	Three (5)
T. Burlington	\$355,290,900	\$7.01	\$0	\$0.0587	\$0.0000	-\$0.0123
T. Caledonia	\$1,126,897,800	\$9.65	\$0	\$0.0587	\$0.0818	\$0.0867
T. Dover	\$186,292,300	\$6.21	\$0	\$0.0587	\$0.0000	-\$0.0123
T. Mt. Pleasant	\$1,340,313,000	\$10.57	\$0	\$0.0587	\$0.0818	\$0.0867
T. Norway	\$421,385,800	\$6.60	\$0	\$0.0587	\$0.0000	-\$0.0123
T. Raymond	\$225,155,000	\$6.69	\$0	\$0.0587	\$0.0818	\$0.0867
T. Rochester	\$123,683,700	\$5.23	\$0	\$0.0587	\$0.0000	-\$0.0123
T. Waterford	\$353,998,400	\$7.05	\$0	\$0.0587	\$0.0000	-\$0.0123
T. Yorkville	\$231,288,000	\$6.27	\$0	\$0.0587	\$0.0818	\$0.0867
V. Elmwood Park	\$30,039,600	\$8.60	\$0	\$0.0587	\$0.0818	\$0.0867
V. North Bay	\$22,390,200	\$13.04	\$0	\$0.0587	\$0.0818	\$0.0867
V. Rochester	\$43,137,300	\$5.95	\$0	\$0.0587	\$0.0000	-\$0.0123
V. Sturtevant	\$199,790,800	\$10.67	\$0	\$0.0587	\$0.0818	\$0.0867
V. Union Grove	\$158,190,700	\$9.34	\$0	\$0.0587	\$0.0000	-\$0.0123
V. Waterford	\$164,152,200	\$11.78	\$0	\$0.0587	\$0.0000	-\$0.0123
V. Wind Point	\$171,348,200	\$10.26	\$0	\$0.0587	\$0.0818	\$0.0867
C. Burlington	\$485,496,300	\$11.58	\$0	\$0.0587	\$0.0000	-\$0.0123
C. Racine	\$2,459,986,100	\$18.34	\$0	-\$0.1344	-\$0.1113	-\$0.1064

- 1. County and municipal tax rate per \$1,000 of equalized value.
- 2. Current plan with \$100,000 from County and \$475,000 from City of Racine.
- 3. Racine County provides \$575,000 annual subsidy.
- 4. Racine County continues to contribute \$100,000 per year and \$475,000 is paid by eastern Racine County communities.
- 5. County discontinues its contribution and the total \$575,000 annual subsidy is funded by eastern Racine County communities.

Table 9
Racine Zoological Gardens
Eastern Racine County Community Contributions Under Alternative Funding Plans

	Current	Alternative	Alternative	Alternative
Community	Share (1)	One (2)	Two (3)	Three (4)
T. Caledonia	\$13,914	\$80,007	\$106,088	\$111,580
T. Mt. Pleasant	\$16,549	\$95,159	\$126,180	\$132,711
T. Raymond	\$2,780	\$15,986	\$21,197	\$22,294
T. Yorkville	\$2,856	\$16,421	\$21,774	\$22,901
V. Elmwood Park	\$371	\$2,133	\$2,828	\$2,974
V. North Bay	\$276	\$1,590	\$2,107	\$2,217
V. Sturtevant	\$2,467	\$14,185	\$18,809	\$19,782
V. Wind Point	\$2,116	\$12,165	\$16,131	\$16,966
C. Racine	\$505,375	\$174,655	\$231,590	\$243,575
Total	\$546,704	\$412,301	\$546,704	\$575,000

- 1. Current plan with \$100,000 from Racine County and \$475,000 from the City of Racine.
- 2. Racine County provides \$575,000 annual subsidy.
- 3. Racine County continues to contribute \$100,000 per year and \$475,000 is paid by eastern Racine County communities.
- 4. County discontinues its contribution and the total \$575,000 annual subsidy is funded by eastern Racine County communities.

Table 10
Racine Zoological Gardens
Total Annual Property Tax Contribution to the Zoo for a \$125,000 Home Under Alternative Funding Plans

	Total 1998	Current	Alternative	Alternative	Alternative
Municipality	Equalized Value	Plan (1)	One (2)	Two (3)	Three (4)
T. Caledonia	\$1,126,897,800	\$1.54	\$8.87	\$11.77	\$12.38
T. Mt. Pleasant	\$1,340,313,000	\$1.54	\$8.87	\$11.77	\$12.38
T. Raymond	\$225,155,000	\$1.54	\$8.87	\$11.77	\$12.38
T. Yorkville	\$231,288,000	\$1.54	\$8.87	\$11.77	\$12.38
V. Elmwood Park	\$30,039,600	\$1.54	\$8.87	\$11.77	\$12.38
V. North Bay	\$22,390,200	\$1.54	\$8.87	\$11.77	\$12.38
V. Sturtevant	\$199,790,800	\$1.54	\$8.87	\$11.77	\$12.38
V. Wind Point	\$171,348,200	\$1.54	\$8.87	\$11.77	\$12.38
C. Racine	\$2,459,986,100	\$25.68	\$8.87	\$11.77	\$12.38

- 1. Current plan with \$100,000 from Racine County and \$475,000 from the City of Racine.
- 2. Racine County provides \$575,000 annual subsidy.
- 3. Racine County continues to contribute \$100,000 per year and \$475,000 is paid by eastern Racine County communities.
- 4. County discontinues its contribution and the total \$575,000 annual subsidy is funded by eastern Racine County communities.

APPENDIX 4

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE WUSTUM MUSEUM OF FINE ARTS

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE WUSTUM MUSEUM OF FINE ARTS

The Charles A. Wustum Museum of Fine Arts, located in a 13-acre park setting on Northwestern Avenue in the City of Racine, offers free admission to Museum exhibits and a variety of arts classes to residents of the City, County and region. Since 1990, the Museum has focused on becoming a nationally prominent craft center and has added several hundred works of glass, fiber, ceramics, metal, paper, plastic and wood. A large donation of contemporary American craft by Karen Johnson Boyd in 1992 brought the museum national attention and additional gifts from artists and collectors across the country. In addition to offering free admission seven days a week to view its collection, the museum provides studio art classes for ages 4 through adult, free guided tours, lectures, and an outreach program for fourth grade students in the Racine Unified School District. Although current data is not available, a 1990 report by the Wustum Museum Art Association showed steadily increasing annual museum attendance that had reached 43,000 visitors in 1989. Likewise, annual enrollment in art classes increased significantly during the 1980's, reaching 1,700 in 1989. City residents composed 45% of museum members in 1989, while other county residents accounted for 38% of members and the remaining 17% of museum members resided outside of Racine County. The Museum Association did not have current data on the residence of museum visitors, but believed that visitor attendance was likely to follow the pattern of museum membership. With its regionally and nationally recognized collection and wide membership base, the Wustum Museum clearly serves a larger area than just the City of Racine.

The farmhouse and grounds that house the museum were donated to the City of Racine in 1938 by Mrs. Jennie Wustum, along with a small trust fund that generates revenue to help offset museum operating costs. Between 1941 and 1980 the City of Racine and the Racine Art Association jointly operated the Museum under an informal agreement. The City maintained and staffed the Museum while the Art Association provided for volunteers and programming. In the late 1970's, a blue ribbon committee established by the mayor and a professional museum management consultant both recommended that the City contract with the Art Association to operate the Museum. The Museum operated under the contract between the City and the Art Association from 1980 through 1991. In 1992, the City signed a new contract with the Art Association's successor, the Wustum Museum Art Association, to operate the Museum. The City provides the building and grounds free of charge, performs major maintenance on the property, and contributes an annual operating subsidy for the Museum. The Association assumes general operating control of the Museum, including such items as care of museum grounds and minor maintenance, management of exhibitions, conduct of classes and tours, and employment and compensation of all museum personnel.

MUSEUM FUNDING

As shown in Table 1, the Museum expends over \$700,000 per year and receives approximately the same amount in revenues. Support for the Museum comes primarily from two sources: the City of Racine and the Wustum Museum Art Association. As shown in Table 2, the Association contribution includes funds raised through tuition for art classes, gifts and grants, fund raising, membership fees, exhibition sales, interest income and auxiliary activities. The Association's various revenue generating activities account for approximately 70% of the museum's total annual revenues.

The City of Racine provides the other major source of Museum revenues. By contract, the City contributes an annual operating subsidy as well as maintenance services and use of the building and grounds. As shown in Table 2, the City's contribution, including maintenance services, comprises approximately 30% of the Museum's annual operating revenues. In addition, the City provides use of the building and grounds that house the Museum collection. The CPA firm of

Clifton Gunderson, L.L.C. estimated the annual rental value of the museum building and grounds at \$147,808. Since this property was donated to the City for the express purpose of housing a museum, it may not be appropriate to consider the rental value as a contribution by the City. However the City has been providing annual repairs and maintenance on the museum facilities and it could be argued that these contributions, over the years, have maintained and improved the museum and therefore the City does have a capital investment in the museum. In addition, in the past twelve years, the City has made significant long-term improvements to the museum building and grounds.

FUTURE MUSEUM PLANS

The Museum Association is currently considering major plans for the expansion of the museum. A downtown site is being considered for relocation and expansion of the exhibition facilities. The plan calls for the current building to be used for art instruction and training. The Museum Director states that with expansion of the exhibition facilities, the Museum could rank as one of the top four craft exhibition centers in the country. It is anticipated that the new facility would attract many more visitors and provide an economic benefit to the area. Preliminary estimates indicate that the expanded facility will require approximately \$200,000 per year in additional governmental assistance. The Director has indicated that the Association will request approximately \$100,000 per year in assistance from the County and an additional \$100,000 per year from the City.

MUSEUM GOVERNMENT FUNDING ALTERNATIVE

Since the Wustum Museum is a regional facility, it would be appropriate to consider sharing the cost of the operating subsidy among municipalities in Racine County. The City of Racine currently bears the cost of subsidizing a facility that is enjoyed by residents of the entire County and other counties as well. One alternative for a more equitable distribution of the Wustum Museum subsidy would be for Racine County to assume the funding responsibility currently held by the City. Since the City owns the museum property and trust fund, this would require a contract between the City, County and Museum Association to define the responsibilities of each party. One option may be for the County to contract with the City for major maintenance of the property and with the Association for operation and management of the Museum.

If the County assumed the required subsidy funding responsibility for the Museum, the annual subsidy would be covered by an increase in the county property tax. Table 4 shows the property tax increase that would be required to cover the 1999 subsidy based on 1998 equalized values. A countywide property tax rate increase of \$.024 per \$1,000 of equalized value would be sufficient to pay for an operating subsidy of approximately \$198,000. This would reduce the contribution of City of Racine residents by approximately \$138,000 and allow a net decrease of \$.056 per \$1,000 of equalized value in the combined City and County property tax rates. Other municipalities would contribute modest amounts to the Museum through County property taxes. These annual amounts would range from approximately \$500 per year to \$33,000 per year.

An alternative solution would be for the municipalities in Eastern Racine County to share the cost of subsidizing museum operation. Although exact data is not available, it is likely that residents of these municipalities, due to their proximity, utilize the Museum at a higher rate than residents of the western half of the County. Under this funding option, the City would continue contributing the same annual amount and the Museum would be operated under the current contract between the City and the Museum Association. The City would enter into intermunicipal revenue sharing agreements with the communities of Eastern Racine County whereby each community would provide a payment to the City of Racine in order to compensate the City for a share of the subsidy. The contributions from each municipality could be based upon the share of total equalized value in Eastern Racine County. Table 5 shows the distribution

of the cost of museum funding under this alternative based on 1998 equalized value. Contributions of \$114,000 from other municipalities would reduce the City of Racine's net contribution by approximately \$114,000 per year and allow for a net reduction of \$.046 per \$1,000 of equalized value in the property tax rate for City residents given the current level of subsidy. An increase of \$.034 per \$1,000 of equalized value would be required for all other municipalities to generate the contributions shown in Table 5.

Future expansion of the Museum is likely to result in a need for additional governmental assistance. Although additional assistance has not yet been agreed upon, an estimate can be developed of the fiscal impact of additional funding along with the sharing of cost between communities. Based on an estimated \$200,000 of additional annual government subsidy, Tables 6 and 7 show the fiscal impacts for a Racine County funding option and an Eastern Racine County funding option.

In addition to the operating contribution currently being made by the City, the City has funded significant capital improvements to the museum facilities. In the past twelve years, the City has expended more than \$500,000 for major long-term improvements (Appendix 1). These improvements do not include annual maintenance and repair services that the City also contributes. It may be appropriate for the participating communities to reimburse the City for a share of the capital improvements currently in place as well as share in future capital expenditures. Table 8 shows an allocation whereby the communities in Eastern Racine County would reimburse the City approximately \$23,000 per year for prior capital contributions.

RACINE HERITAGE MUSEUM

The Racine Heritage museum offers exhibits and programs focusing on the culture and entrepreneurial achievements of Racine County and Southeastern Wisconsin. Located in downtown Racine, the Museum hosts an average of over 12,000 visitors per year, offers programs to over 2,000 participants and provides archive data services six hours a week, fifty weeks a year. In addition, the Society and the Museum support and participate in community organizations and activities, such as the sesquicentennial celebrations and the county fair. The Museum is housed in a 1902 historic building that the Society leases from Racine County at no cost.

Funding for Museum operations is provided in part by Racine County. The remaining costs are funded by memberships, fees for services, programs, exhibits, fund raisers, the Museum sales shop and donations. Actual revenues per year by source for 1994 through 1998 are shown in Table 3. During this period, the County contributed an average of 51% of the annual revenues, while the Museum raised the remaining 49%. The Museum does not receive any direct funding from the City of Racine or other municipalities in the County. Since the Racine Heritage Museum is supported by the County, the cost of operating this regional facility is effectively shared among residents of all Racine County municipalities. This funding method provides for a reasonable and equitable method of distributing the cost among communities in the county.

CONCLUSION AND RECOMMENDATION

The Charles A. Wustum Museum of Fine Arts clearly reaches a wider audience than the City of Racine and adds to the cultural experience of residents of Racine County. The City of Racine currently carries the entire cost of funding the gap between the Museum Association's revenues and the cost of operating the Museum. Were it not for the City's contribution, the Museum could not offer free admission and the variety of outreach programs that are enjoyed by residents of Racine County.

Given the Museum's large service area, it may be appropriate to share the cost of subsidizing the Museum among residents of the entire County or residents of Eastern Racine County municipalities. County funding of the Museum would share the costs over a wider area and would significantly reduce the funding contribution of the City of Racine. It would, however, require renegotiation of the Museum operating contract and an increase in the County property tax. Sharing the cost of Museum funding among Eastern Racine County municipalities would result in slightly higher costs to each of these municipalities than they would pay under county funding. However, this alternative would be easier to implement and more equitable than the current arrangement. It is therefore recommended that the communities of eastern Racine County share in the local government contribution for museum funding according to their share of the area's equalized values, as shown in Table 5.

Table 1 Wustum Museum Art Association, Inc. Operating Cash Flow Statements

	1995	1996	1997	1998	1999 Budget
Revenues (+) (1) (2) (3)	\$677,610	\$643,728	\$607,509	\$658,210	\$702,065
Expenses (-) (2) (3)	\$502,342	\$585,508	\$604,501	\$670,002	\$702,065
Adjustment for Non-Cash Items (+) (3)	\$14,341	\$18,773	\$13,428	\$27,538	\$12,341
Operating Cash Flow	\$189,609	\$76,993	\$16,436	\$15,746	\$12,341

- 1. Does not include \$15,000 of annual support for maintenance.
- 2. Excludes \$147,808 estimated rental value on museum building, which is shown as a revenue and expense on financial statements. The City provides the building and grounds on a rent-free basis.
- 3. Source--Audited Financial Statements (1995-1998) and 1999 Museum Budget.

Table 2 Wustum Museum Art Association, Inc. Revenues, 1997 - 1999

			1999
	1997	1998	Budget
Revenues			
Tuition	\$61,558	\$75,403	\$75,775
Gifts and Grants	\$173,797	\$216,325	\$220,950
Fund Raising	\$23,686	\$28,907	\$25,800
Membership Fees	\$47,187	\$46,066	\$51,000
Exhibit Sales	\$44,278	\$13,324	\$13,800
Auxilary Activities	\$33,691	\$40,352	\$40,540
Interest	\$45,302	\$57,506	\$83,801
City Contribution	\$176,562	\$180,341	\$182,974
City Maintenance Contribution (1)	\$13,408	\$15,000	\$15,000
Miscellaneous	\$1,448	-\$14	\$7,425
Total Revenues (2)	\$620,917	\$673,210	\$717,065
Total City Contribution	\$189,970	\$195,341	\$197,974
Percentage of Total Revenues	31%	29%	28%

- 1. The City provides approximately \$15,000 per year for maintenance. This item does not show up as a revenue source on the Museum financial statements.
- 2. Audited financial statements show \$147,808 estimated rental value on museum as a revenue and expense.
- 3. Source--Audited Financial Statements (1995-1998) and 1999 Museum Budget.

Table 3 Racine Heritage Museum Revenues by Source, 1994-1998

	1994	1995	1996	1997	1998	Average
County Allocation	\$105,950	\$105,950	\$120,392	\$130,000	\$130,000	\$118,458
Raised by Museum (1)	\$104,729	\$131,462	\$64,735	\$108,708	\$177,449	\$117,417
Total Revenues	\$210,679	\$237,412	\$185,127	\$238,708	\$307,449	\$235,875
Percent Contributed by County	50.3%	44.6%	65.0%	54.5%	42.3%	51.3%

1) Includes funds raised through memberships, fees for services, programs, exhibits, fund raisers, sales, and donations.

Table 4
Wustum Museum Art Association, Inc.
County Funding Option

			Share of Museum			Current	Proposed	
	Total 1998		Operating	Current		Rate per	Rate per	
Community	Equalized Value	Percent	Subsidy (1)	Contribution	Difference		\$1,000 E.V.	Difference
T. Burlington	\$355,290,900	4.4%	\$8,685	\$0	\$8,685	\$0.000	\$0.024	\$0.024
T. Caledonia	\$1,126,897,800	13.9%	\$27,547	\$0	\$27,547	\$0.000	\$0.024	\$0.024
T. Dover	\$186,292,300	2.3%	\$4,554	\$0	\$4,554	\$0.000	\$0.024	\$0.024
T. Mt. Pleasant	\$1,340,313,000	16.5%	\$32,764	\$0	\$32,764	\$0.000	\$0.024	\$0.024
T. Norway	\$421,385,800	5.2%	\$10,301	\$0	\$10,301	\$0.000	\$0.024	\$0.024
T. Raymond	\$225,155,000	2.8%	\$5,504	\$0	\$5,504	\$0.000	\$0.024	\$0.024
T. Rochester	\$123,683,700	1.5%	\$3,023	\$0	\$3,023	\$0.000	\$0.024	\$0.024
T. Waterford	\$353,998,400	4.4%	\$8,653	\$0	\$8,653	\$0.000	\$0.024	\$0.024
T. Yorkville	\$231,288,000	2.9%	\$5,654	\$0	\$5,654	\$0.000	\$0.024	\$0.024
V. Elmwood Park	\$30,039,600	0.4%	\$734	\$0	\$734	\$0.000	\$0.024	\$0.024
V. North Bay	\$22,390,200	0.3%	\$547	\$0	\$547	\$0.000	\$0.024	\$0.024
V. Rochester	\$43,137,300	0.5%	\$1,054	\$0	\$1,054	\$0.000	\$0.024	\$0.024
V. Sturtevant	\$199,790,800	2.5%	\$4,884	\$0	\$4,884	\$0.000	\$0.024	\$0.024
V. Union Grove	\$158,190,700	2.0%	\$3,867	\$0	\$3,867	\$0.000	\$0.024	\$0.024
V. Waterford	\$164,152,200	2.0%	\$4,013	\$0	\$4,013	\$0.000	\$0.024	\$0.024
V. Wind Point	\$171,348,200	2.1%	\$4,189	\$0	\$4,189	\$0.000	\$0.024	\$0.024
C. Burlington	\$485,496,300	6.0%	\$11,868	\$0	\$11,868	\$0.000	\$0.024	\$0.024
C. Racine	\$2,459,986,100	30.4%	\$60,134	\$197,974	-\$137,840	\$0.080	\$0.024	-\$0.056
Total	\$8,098,836,300	100.0%	\$197,974	\$197,974	\$0			

County Rate per \$1,000 Equalized Value

\$0.024

Notes:

1) Does not include the \$147,808 estimated annual rental value of the Museum property owned by the City.

Table 5 Wustum Museum Art Association, Inc. Eastern Racine County Funding Option

			Share of Museum			Current Local	Proposed	
	Total 1998		Operating	Current		Rate per	County Rate	
Community	Equalized Value	Percent	Subsidy (1)	Contribution	Difference	\$1,000 E.V.	per \$1,000 E.V.	Difference
T. Caledonia	\$1,126,897,800	19.4%	\$38,417	\$0	\$38,417	\$0.000	\$0.034	\$0.034
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$45,693	\$0	\$45,693	\$0.000	\$0.034	\$0.034
T. Raymond	\$225,155,000	3.9%	\$7,676	\$0	\$7,676	\$0.000	\$0.034	\$0.034
T. Yorkville	\$231,288,000	4.0%	\$7,885	\$0	\$7,885	\$0.000	\$0.034	\$0.034
V. Elmwood Park	\$30,039,600	0.5%	\$1,024	\$0	\$1,024	\$0.000	\$0.034	\$0.034
V. North Bay	\$22,390,200	0.4%	\$763	\$0	\$763	\$0.000	\$0.034	\$0.034
V. Sturtevant	\$199,790,800	3.4%	\$6,811	\$0	\$6,811	\$0.000	\$0.034	\$0.034
V. Wind Point	\$171,348,200	3.0%	\$5,841	\$0	\$5,841	\$0.000	\$0.034	\$0.034
C. Racine	\$2,459,986,100	42.4%	\$83,864	\$197,974	-\$114,110	\$0.080	\$0.034	-\$0.046
Total	\$5,807,208,700	100.0%	\$197,974	\$197,974	\$0			

1) Does not include the \$147,808 estimated annual rental value of the Museum property owned by the City.

Table 6
Wustum Museum Art Association, Inc.
County Funding Option (\$400,000 Annual Subsidy)

	Total 1998		Share of Museum Operating	Current		Current Rate per	Proposed Rate per	
Community	Equalized Value	Percent	Subsidy (1)	Contribution	Difference	\$1,000 E.V.	\$1,000 E.V.	Difference
T. Burlington	\$355,290,900	4.4%	\$17,548	\$0	\$17,548	\$0.000	\$0.049	\$0.049
T. Caledonia	\$1,126,897,800	13.9%	\$55,657	\$0	\$55,657	\$0.000	\$0.049	\$0.049
T. Dover	\$186,292,300	2.3%	\$9,201	\$0	\$9,201	\$0.000	\$0.049	\$0.049
T. Mt. Pleasant	\$1,340,313,000	16.5%	\$66,198	\$0	\$66,198	\$0.000	\$0.049	\$0.049
T. Norway	\$421,385,800	5.2%	\$20,812	\$0	\$20,812	\$0.000	\$0.049	\$0.049
T. Raymond	\$225,155,000	2.8%	\$11,120	\$0	\$11,120	\$0.000	\$0.049	\$0.049
T. Rochester	\$123,683,700	1.5%	\$6,109	\$0	\$6,109	\$0.000	\$0.049	\$0.049
T. Waterford	\$353,998,400	4.4%	\$17,484	\$0	\$17,484	\$0.000	\$0.049	\$0.049
T. Yorkville	\$231,288,000	2.9%	\$11,423	\$0	\$11,423	\$0.000	\$0.049	\$0.049
V. Elmwood Park	\$30,039,600	0.4%	\$1,484	\$0	\$1,484	\$0.000	\$0.049	\$0.049
V. North Bay	\$22,390,200	0.3%	\$1,106	\$0	\$1,106	\$0.000	\$0.049	\$0.049
V. Rochester	\$43,137,300	0.5%	\$2,131	\$0	\$2,131	\$0.000	\$0.049	\$0.049
V. Sturtevant	\$199,790,800	2.5%	\$9,868	\$0	\$9,868	\$0.000	\$0.049	\$0.049
V. Union Grove	\$158,190,700	2.0%	\$7,813	\$0	\$7,813	\$0.000	\$0.049	\$0.049
V. Waterford	\$164,152,200	2.0%	\$8,107	\$0	\$8,107	\$0.000	\$0.049	\$0.049
V. Wind Point	\$171,348,200	2.1%	\$8,463	\$0	\$8,463	\$0.000	\$0.049	\$0.049
C. Burlington	\$485,496,300	6.0%	\$23,979	\$0	\$23,979	\$0.000	\$0.049	\$0.049
C. Racine	\$2,459,986,100	30.4%	\$121,498	\$197,974	-\$76,476	\$0.080	\$0.049	-\$0.031
Total	\$8,098,836,300	100.0%	\$400,000	\$197,974	\$202,026		_	

County Rate per \$1,000 E.V.

\$0.049

Notes:

1) Does not include the \$147,808 estimated annual rental value of the Museum property owned by the City. Includes \$197,974 (rounded to \$200,000) existing costs plus \$200,000 proposed new costs per year.

Table 7
Wustum Museum Art Association, Inc.
Eastern Racine County Funding Option (\$400,000 Annual Subsidy)

			Share of Museum			Current Local	Proposed County Rate	
	Total 1998		Operating	Current		Rate per	per \$1,000	
Community	Equalized Value	Percent	Subsidy (1)	Contribution	Difference	\$1,000 E.V.	E.V.	Difference
T. Caledonia	\$1,126,897,800	19.4%	\$77,621	\$0	\$77,621	\$0.000	\$0.069	\$0.069
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$92,321	\$0	\$92,321	\$0.000	\$0.069	\$0.069
T. Raymond	\$225,155,000	3.9%	\$15,509	\$0	\$15,509	\$0.000	\$0.069	\$0.069
T. Yorkville	\$231,288,000	4.0%	\$15,931	\$0	\$15,931	\$0.000	\$0.069	\$0.069
V. Elmwood Park	\$30,039,600	0.5%	\$2,069	\$0	\$2,069	\$0.000	\$0.069	\$0.069
V. North Bay	\$22,390,200	0.4%	\$1,542	\$0	\$1,542	\$0.000	\$0.069	\$0.069
V. Sturtevant	\$199,790,800	3.4%	\$13,762	\$0	\$13,762	\$0.000	\$0.069	\$0.069
V. Wind Point	\$171,348,200	3.0%	\$11,802	\$0	\$11,802	\$0.000	\$0.069	\$0.069
C. Racine	\$2,459,986,100	42.4%	\$169,444	\$197,974	-\$28,530	\$0.080	\$0.069	-\$0.012
Total	\$5,807,208,700	100.0%	\$400,000	\$197,974	\$202,026			

¹⁾ Does not include the \$147,808 estimated annual rental value of the Museum property owned by the City. Includes \$197,974 (rounded to \$200,000) existing costs plus \$200,000 proposed new costs per year.

Table 8 Charles A. Wustum Museum of Fine Arts Capital Cost Allocation

			Annual
	Total 1998		Capital
Community	Equalized Value	Percent	Charge
T. Caledonia	\$1,126,897,800	19.4%	\$7,863
T. Mt. Pleasant	\$1,340,313,000	23.1%	\$9,353
T. Raymond	\$225,155,000	3.9%	\$1,571
T. Yorkville	\$231,288,000	4.0%	\$1,614
V. Elmwood Park	\$30,039,600	0.5%	\$210
V. North Bay	\$22,390,200	0.4%	\$156
V. Sturtevant	\$199,790,800	3.4%	\$1,394
V. Wind Point	\$171,348,200	3.0%	\$1,196
Subtotal	\$3,347,222,600	57.6%	\$23,357
C. Racine	\$2,459,986,100	42.4%	\$17,166
Total	\$5,807,208,700	100%	\$40,523
Total Capital Costs (1)		\$505,000	
Annual Amortization of Balan	nce @ 5% ⁽²⁾	\$40,523	

- 1) Major capital improvements 1987-1998 (see Appendix 1).
- 2) Amortized over next 20 years.

Appendix 1 Charles A. Wustum Museum of Fine Arts Major Capital Improvements, 1987 - 1998

Year	Item	Amount
1998	Siding and Windows	\$3,000
1998	Fence	\$10,000
1997	Relamp Classroom	\$14,000
1997	Fountain	\$5,000
1996	Roof	\$155,000
1996	Cupola	\$7,000
1995	Porch	\$5,000
1993	Parking Lot	\$191,000
1988	Parking Lot	\$80,000
1987	Climate Control System	\$35,000
Total		\$505,000

1) Source - City of Racine Finance Director.

APPENDIX 5

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE BELLE URBAN TRANSIT SYSTEM

AN INTERMUNICIPAL COST SHARING ANALYSIS FOR SERVICES PROVIDED BY THE BELLE URBAN TRANSIT SYSTEM

The Belle Urban System provides public transit service to the City of Racine and surrounding communities. The system, which is owned by the City of Racine, has been in operation since 1975 when the City took over the public transit system from a private operator. The City provides a fixed route bus service, which includes 11 regular routes, a special downtown circular route and two tripper routes. A detailed description of bus services is provided in the <u>Racine Area Transit System Development Plan: 1998-2002</u>, which was prepared by the Southeastern Wisconsin Regional Planning Commission (SEWRPC).

The City is also required, under the Americans with Disabilities Act of 1990, to provide paratransit services to disabled individuals who reside within ¼ mile of a fixed route bus stop. To fulfill this requirement, the City contracts with the County to provide the required paratransit service to residents in the bus service area. The County provides the service to the City through the Human Services Department, which provides door-to-door transit service to disabled individuals in the County on a reservation basis. The City pays a negotiated amount to the County for paratransit service, which amounts to approximately \$200,000 per year. The remaining costs of paratransit service are recovered through passenger fares and county, state and federal funding.

ATE Management and Services Company, Inc. who is under contract through June 30, 1999 operates the Belle Urban System. The City is currently considering proposals from ATE and other firms for a new contract, which would begin on July 1, 1999. The contract operator reports to the City of Racine Department of Transportation. The policy-making body for the transit system is the Racine Transit and Parking Commission with the Racine Common Council holding responsibility for review and approval of major issues, including the annual budget.

Funding for system operating and maintenance costs comes from farebox revenues, state and federal aids and local funds. In recent years, farebox and miscellaneous revenues have accounted for approximately 21% of the total annual revenues (Table 1). With total revenues budgeted to equal the total cash based operating costs (operating costs less depreciation), a public subsidy of approximately 79% of costs is required to operate the system. This subsidy is funded through state and federal aids and local property taxes. Total budgeted operating costs for 1999 are approximately \$4.8 million. Of this total, local funding will cover approximately \$910,000. Capital costs are covered by a combination of Federal and local funds. Federal funds cover approximately 80% of capital costs, with the remaining covered by local funds.

As mentioned previously, the Belle Urban System provides service to the City of Racine and surrounding communities. In addition to bus routes in the City, routes extend to the Village of Sturtevant, the Town of Mt. Pleasant, the Town of Caledonia and the University of Wisconsin at Parkside, located in Kenosha County. The City has entered into agreements with these communities in order to provide transit services and to recover costs relating to the provision of these services. All four service agreements run for a twelve month period and are renewed annually. The agreements define the routes and hours of service to each community. The agreements also provide a formula by which the City bills each community for its local share of the system operating deficit. The system deficit is determined by subtracting all revenues and state and federal aids from the total operation, maintenance and depreciation expenses. The billing calculations for each community are based upon the same basic formula with some small differences for some communities. Billing calculations are performed on a monthly basis with communities billed quarterly. An annual true-up adjustment is made after the annual audit is completed. The basic billing calculation is performed as follows:

Divide the total system expenses by the total system miles served to get a system wide cost per mile. The total system expenses include all system operating, administrative and capital costs, including overhead, maintenance, depreciation, and the City payment for specialized paratransit service.

Calculate the total community route miles for the period. This includes only the miles traveled within the municipality, with the exception of Route 9 serving UW-Parkside, which is paid for entirely by UW-Parkside.

Estimate the total community farebox revenues. With the exception of Route 10 to Caledonia, this is estimated based on the system-wide average revenue per mile. Since Route 10 operates entirely within Caledonia, the calculation for this route uses the actual farebox revenues for the route.

Calculate the community route expense. This is the system-wide average cost per mile times the route miles within the community.

Calculate the community deficit by subtracting revenues from expenses.

Calculate the community deficit net of state and federal aids by subtracting the estimated state and federal aid share of the deficit from the calculated community deficit. For 1999, state and federal aids are estimated to cover 54.7 and 25.7 percent of the deficit respectively.

The billing amount equals the community share of the deficit, net of state and federal aids.

A detailed example of a community billing calculation is provided in Table 2.

The system also has routes that pass through Elmwood Park and North Bay. However, the route passing through North Bay provides service to Racine north and south of North Bay and its current route is the most convenient path to service these areas in Racine. The route passing through Elmwood Park serves UW-Parkside, so the costs of that route are covered by agreement with UW-Parkside. Therefore, Racine does not charge either of these municipalities for the service provided within their boundaries.

The above billing method provides for a total allocation of costs to each route. Each community shares in the system deficit based upon the amount of route miles served within its borders. This allows for a straightforward method of allocating costs. Another alternative would be to allocate costs on the basis of ridership. However, an allocation of costs based upon ridership would not be practical for several reasons. First, this method of cost allocation would require periodic surveys of the riders to determine the origins, destinations and amount of fares paid by the riders on each route. It would not be economically feasible to gather this level of detailed passenger and fare data on a regular basis. In addition, there is the issue of which community benefits from a trip taken between one community and another. If a resident of Community A leaves in the morning and rides the bus to a job in Community B, does the benefit accrue to Community A or Community B, or both? The obvious answer would be to designate the benefit to Community A. However, in metropolitan areas such as Racine, employers in the growing suburban municipalities may find it difficult to find a sufficient amount of workers without reliable transit service between the central city and the growing employment centers. Thus, it could also be argued that the municipality with the employment center benefits equally from the transit service. The billing formula used by Racine incorporates readily available data and is based on the concept that each municipality pays for the actual costs of providing service within that municipality. This allocation theory is practical and has been acceptable to both Racine and the other communities served.

Racine has had two recent requests for changes in the service to outlying communities. The Town of Caledonia has requested a reduction in service to its community. In April of 1999, Racine passed a resolution reducing the number of trips and eliminating the service loop of Route 10 running on Four Mile Road, Green Bay Road, Three Mile Road and Douglas Avenue. In addition, the Town of Caledonia requested that the Racine discontinue the extension of Route 1 serving the Greentree Shopping Center located at Four Mile Road and Douglas Avenue. Racine will continue running the Route 1 extension, at no cost to the Town of Caledonia, until the transit system policy can be redefined.

The Village of Sturtevant has requested increased transit service along the STH 20 corridor. Some of the alternatives being examined include adding a bus to Route 20 and providing shuttle bus service during the midday period between J.I. Case High School, the end of Route 3, and the Renaissance Industrial Park. The details of these alternatives will be presented to the Sturtevant Village Board in May 1999.

Route 20 currently provides weekday bus service between Racine and the Grandview Industrial Park, which is located west of Interstate 94. There are seven westbound trips daily and six eastbound trips daily. One of the eastbound trips and two of the westbound trips are nonstop. Other trips make numerous stops daily. Approximately 170 total route miles are served on each weekday. Through 1998, Route 20 was subsidized by local businesses and the Racine Area Manufacturers and Commerce Association. Since this funding is no longer available, the City of Racine currently funds the entire cost of Route 20, although the route provides service to the Town of Mount Pleasant and the Village of Sturtevant. Annual operating costs for Route 20 are approximately \$36,000. Based upon a breakdown of service miles for each community provided by the City Transit Planner, a community cost allocation was performed (Table 3). Since the City has not requested the participation of Mount Pleasant or Sturtevant for the cost of providing the Route 20 service, the City is providing an annual subsidy of approximately \$25,000 to the outlying communities.

The current billing system provides a fair and straightforward method of allocating costs for routes that come under cost sharing agreements. Participating communities share both capital and O&M costs. However, the system does have several weaknesses. First, the system is dependent upon an annual renewal or rewriting of agreements with the communities served in order to recover costs for service outside the Racine City limits. Each time the system considers providing service outside the Racine City limits, the decision must take into account not just the efficiency of the proposed route, but also the willingness of the other impacted municipalities to pay for service. In some cases, Racine has decided to continue a route, such as Route 20, without any cost sharing from other communities served. This results in other communities not paying their fair share of the costs. Communities can request reductions in service at the end of any contract year. This can lead to frequent changes to bus routing that may inhibit both shortterm and long-term transit planning and cause inconvenience to riders dependent upon the system. The addition or elimination of routes involves a significant level of planning on the part of the system in both the short term and the long term. In the short term, routes must be rescheduled, and re-routed and drivers re-assigned. In the long term, the system needs to make plans to maintain the appropriate number of buses and physical facilities. New buses must typically be ordered at least 2 1/2 years in advance and they require a significant capital investment. For these reasons, it is difficult for the system to operate efficiently if it has to make frequent unplanned route changes. The transit plan prepared by SEWRPC calls for additional services to be added in the future to serve the expanding metropolitan area. This would require negotiations regarding fair cost allocations each time new service is added. If the system continues to operate by negotiating contracts with outside communities on a yearly basis, it may be difficult to implement the SEWRPC plan for a logical extension of services across municipal boundaries. Finally, under the current system, the City of Racine invests in the capital for the system up front and later recovers a portion of the capital costs through its annual billings to other municipalities. Therefore, the city has the burden of seeking initial financing for major capital improvement projects.

The City Transit Planner has suggested that the transit system should be transferred to the county or a new regional authority. Such a transfer would provide several advantages and would address many of the weaknesses discussed above. First, a county or regional transit authority would eliminate the issue of municipal boundaries when making decisions of where to provide service. The system could provide service wherever it is most efficient to do so, without concerns about whether each municipality served will pay its fair share. This would also allow the system to plan for route changes in advance and eliminate the inefficiency of frequent unplanned route changes. As the area grows and develops, a county or regional transit authority could plan for logical extensions of service and purchase the necessary fleet without having to first negotiate contracts with all the municipalities involved. A county or regional transit authority would also share the burden of initial investment in capital among all the municipalities served.

A regional transit system would be relatively easy to implement given that the contract operator employs all operating personnel. Racine could transfer the operating contract to the new authority. The transit planner, who is a Racine employee, currently oversees the transit operations for Racine. The transit planner could remain as a Racine employee with the new authority reimbursing Racine for costs relating to his employment or he could be transferred to the new authority. Racine would need to transfer ownership of the assets to the new authority and would also need to determine what compensation would be required in exchange for the system assets.

It is recommended that Racine, the County and the communities served by the transit system consider a transfer of ownership of the Belle Urban System to the County or a new regional authority. A transfer would be relatively easy to implement and would allow for more efficient planning and service to residents and businesses in Eastern Racine County.

Table 1
City of Racine
Belle Urban System
Revenues

	1997		1998		1999	
Revenue Source	Actual	% Share	Budget	% Share	Budget	% Share
Charter	\$23,680	0.50%	\$20,000	0.41%	\$20,000	0.42%
Farebox	\$1,006,187	21.38%	\$920,327	19.04%	\$949,681	19.72%
Federal Assistance	\$674,835	14.34%	\$557,000	11.52%	\$903,505	18.76%
State Assistance	\$2,031,940	43.18%	\$2,135,179	44.18%	\$1,997,197	41.47%
Local Share (1)	\$962,163	20.45%	\$1,184,640	24.51%	\$908,954	18.87%
Other	\$6,933	0.15%	\$16,200	0.34%	\$37,200	0.77%
Total	\$4,705,738	100%	\$4,833,346	100%	\$4,816,537	100%

¹⁾ Includes City operating assistance, school board passenger charge, and contract community fares.

Table 2 City Of Racine Calculation of December Transit Billing for Belle Urban System Village of Sturtevant

1. Calculate the system wide cost per mile.

Divide total expenses for the month by total route miles.

Total Monthly Expenses
$$\frac{\$543,958}{114,424} = \$4.75$$

2. Calculate the community route miles for period.

Multiply the miles per trip by the trips per day by the number of days in a month.

rt.	miles/trip	trips/day	days	miles
а	5.8	22	22	2,807.2
b	4.6	3	22	303.6
С	4.6	23	4	423.2
total				3,534.0

3. Determine the total community farebox revenues.

Multiply the community miles by the system wide revenue per mile. The system wide revenue per mile is calculated at \$.86 by taking the total system revenues divided by the total route miles.

Community Miles		3,534
Revenue per Mile	Х	\$0.86
Community Farebox		\$3,039.24

4. Calculate the community route expenses.

Multiply the community miles by the system wide cost per mile.

Community Miles		3,534
Cost per Mile	Х	\$4.75
Community Expenses		\$16,786.50

Table 2 (Continued)

5. Calculate the community deficit before state and federal aids.

Subtract the community revenues from the community expenses.

Community Expenses	\$16,786.5	0
Community Revenues	- \$3,039.2	4
Community Deficit	\$13,747.2	6

- 6. Calculate the community share of the deficit after state and federal aids.
 - a. Multiply the federal aid share of the deficit by the community deficit.
 - b. Multiply the state aid share of the deficit by the community deficit.
 - c. Subtract a. and b. from the total community deficit.

a. Community Deficit		\$13,747.26
Federal % Share of Deficit	Х	0.257
Federal Share of Deficit		\$3,533.05
		.
b. Community Deficit		\$13,747.26
State % Share of Deficit	Х	0.547
State Share of Deficit		\$7,519.75
c. Community Deficit		\$13,747.26
Less Federal Share		\$3,533.05
Less State Share		\$7,519.75
Net Community Share of Deficit		\$2,694.46

7. The monthly Billing Amount Equals the Net Community Share of the Deficit

December Invoice Amount \$2,694.46

Table 3 City Of Racine Belle Urban System Calculation of Cost for Route 20 Service

Route 20 mileage by Community

Town of Mt. Pleasant Village of Sturtevant Other Municipalities Subtotal City of Racine Total	Weekday 78.5 13.6 26.8 118.9 50.7	Annual 19,625 3,400 6,700 29,725 12,675 42,400
1999 Budgeted Cost per Mile		
System Expense / Mile System Revenue / Mile Federal & State Aid / Mile Local Cost / Mile	\$4.26 \$0.85 \$2.56 \$0.85	
Total Cost for Route 20 service Annual miles Cost / Mile Annual Cost	42,400 \$0.85 \$36,040.00	
Unrecovered Route 20 Cost		
Annual miles Cost / Mile Annual Cost	29,725 \$0.85 \$25,266.25	

APPENDIX 6

AN ANALYSIS OF RACINE COUNTY SHERIFF'S DEPARTMENT SERVICES BENEFITING THE CITY OF RACINE

AN ANALYSIS OF RACINE COUNTY SHERIFF'S DEPARTMENT SERVICES BENEFITTING THE CITY OF RACINE

INTRODUCTION

The Racine County Sheriff's Department provides a wide variety of law enforcement services throughout Racine County. Under Wisconsin Statutes ss.59.27, the County Sheriff is generally required to perform the following duties: take charge of the county jail; attend upon the circuit court and court of appeals when held within the county, as directed by the county board; serve or execute all processes, writs, precepts and orders delivered to the sheriff; enforce all general orders of the department of commerce relating to the sale, transportation and storage of explosives within the county; conduct operations within the county and the waters under county jurisdiction for the rescue of human beings and the recovery of human bodies; keep and preserve the peace, and apprehend or secure any person for felony or breach of the peace. In order to fulfill these duties, the sheriff may request the assistance of other law enforcement personnel or agencies and in return may assist other law enforcement agencies. Other governmental units within the county are not required by statute to provide law enforcement personnel or agencies, and the sheriff is required to preserve the peace throughout the county, regardless of whether a local municipality has its own police force. The sheriff's department is not allowed to unilaterally withdraw investigative services from any municipality within the county that maintains its own police department. This means that the sheriff's department frequently provides services such as dispatch and responses to incidents within cities, towns or villages that have their own police departments.

Although the Sheriff's Department is required to keep the peace throughout the County, many municipalities will choose to maintain a local police department and provide their own patrol, investigative, and dispatch services, relying on the Sheriff's Department as backup. However, every municipality is still required to pay for sheriff services through county property taxes, regardless of the extent to which they actually use such services. If some of the municipalities in a county decide not to provide their own police protection, the Sheriff's Department may charge the municipalities for some of its services, such as patrol or response to 911 calls. In some situations, these arrangements may not recover the full cost of providing services to municipalities without their own police department. This issue raises questions of equity. Do those municipalities that maintain their own police force subsidize those that don't? Should municipalities that maintain their own police force be exempt from some of the cost of operating the Sheriff's Department? Should those municipalities that don't maintain their own police department or that rely on the Sheriff's Department as the sole provider of certain services be required to pay for a larger share of sheriff's department expenses?

The City of Racine requested that Ruekert/Mielke address the above mentioned equity issues as they pertain to services provided to the City by the Racine County Sheriff's Department. This was accomplished in cooperation with the Racine County Sheriff's Department. The following report describes the ways in which the City of Racine utilizes the services of the Racine County Sheriff's Department and estimates the cost of services that benefit the City relative to the contribution of City of Racine residents to the Sheriff's Department through county property taxes.

SHERIFF'S DEPARTMENT ACTIVITIES AND SERVICES

In order to fulfill its duties, the Racine County Sheriff's Department maintains a staff of 273 deputies, investigators, supervisors and civilian staff, making it one of the largest sheriff's departments in the State of Wisconsin. Due to the size and diversity of the County's population, relatively high crime rates, and the presence of Lake Michigan, the Sheriff's Department offers many specialized investigative, crime prevention, safety promotion and educational services. In

general, the Sheriff's Department offers its services countywide. However the targeted area for specific programs or services may be a smaller portion of the County, depending on the need for a given service and the presence and extent of local law enforcement activities.

The Sheriff's Department identified fourteen categories of programs and services that it offers. The following paragraphs describe each of these programs and services and the estimated extent to which the City of Racine benefits from each service. Since the Sheriff's Department serves the entire county regardless of municipal boundaries, the Department does not have detailed information tracking the activity of personnel by location and duration of calls. Therefore, the extent of the benefits received by the City is a reasonable estimate based on the experience of Department personnel working in each program or unit.

SHERIFF DEPARTMENT PATROL

The uniformed patrol division is one of the largest facets of the Racine County Sheriff's Department operations. The patrol division consists of 51 deputies responsible for regularly patrolling throughout the County, excluding the City of Racine, the City of Burlington and the Village of Sturtevant. The Department currently contracts with the Village of Union Grove and the Village of Waterford, who do not have their own police departments, to provide law enforcement services and is in the process of negotiating a similar contract with the Town of Dover. Most other municipalities in the County have their own law enforcement agencies but may not provide 24-hour patrol service. For communities where the Department does not patrol regularly, such as the City of Racine, the Sheriff's patrol serves on a backup or as needed basis.

In 1998, the patrol division worked a total of nearly 73,000 hours and made over 12,000 arrests, or approximately 1,000 per month. Although the Department does not provide routine patrol service to the City of Racine, patrol officers pass through the City on the way to and from the Law Enforcement Center, which is located in downtown Racine. This in effect serves as an additional patrol service for the City. In addition, sheriff patrol squads regularly assist City squads for major incidents, large gatherings and dignitary protection. One indicator of the level of Sheriff Department activity in the City is the number of arrests made within City limits. During the first half of 1999, the Department made 1,100 arrests in the City, or approximately 220 per month. The Department does not have detailed statistics on the number of hours of patrol service provided to the City of Racine, but estimates it to be approximately 5% of total patrol division time.

DETECTIVE BUREAU

The Detective Bureau is part of the Criminal Investigations Unit, which includes the Metro Drug Unit, the Special Investigative Unit (Welfare Fraud Investigations), Consumer Fraud, the District Attorney Liaison, and General Investigations. The Metro Drug Unit and the Special Investigative Unit are described later in this report. The Detective Bureau includes Consumer Fraud, the District Attorney Liaison and General Investigations. One lieutenant and twelve investigators are assigned to the following types of investigative work: criminal investigations, juvenile investigations, consumer fraud, and the District Attorney's investigations.

The General Investigations unit includes investigators with specialized training in investigating arson, abuse and exploitation of the elderly, sexual assault, child sexual abuse and child abuse. The Department has also created a Burglary Theft Unit specializing in the investigation of burglaries and thefts. One investigator participates on the Violent Crimes Fugitive Task Force, which combines the efforts of the Racine County Sheriff's Department, the Kenosha County Sheriff's Department, the City of Racine Police Department and the FBI to clear up outstanding warrants and bring in fugitives.

The Consumer Fraud Division and District Attorney Liaison investigate white-collar crime and consumer-related complaints for the District Attorney's Office. In addition to reviewing consumer complaints, the Division handles embezzlement, major theft, worthless checks, forgeries, open meetings/records violations, misconduct by government employees, election law violations, guardianship frauds, threats to witnesses, perjury complaints and foreclosure sales. Citizens may also contact the Division regarding consumer information or business reputations.

Based on a review of the caseload assigned to each investigator, it was estimated that 13% of the Bureau's workload involves activities in the City of Racine.

SPECIAL ENFORCEMENT UNIT

Sheriff McReynolds created the Special Enforcement Unit in 1995 to respond to gang-related activity, particularly within the City of Racine. The unit combines investigation and patrol activities and targets areas of high crime that require more police presence than can be provided by normal patrol and investigative operations. The unit consists of one sergeant, one investigator and three deputies and frequently conducts operations with the City of Racine Police Department Gang Unit. Most of the unit's activities are focused within the city of Racine, particularly in the Weed and Seed area. However, the unit also assists the Detective Bureau on investigations and helps the Warrant/Commitment Service Unit conduct roundups to clear outstanding commitments.

Based on the number of arrests in 1998 and the estimated amount of time spent within the City, the Department estimated that the Special Enforcement Unit directed approximately 86% of its efforts towards the City of Racine.

COURTS AND CONVEYANCE

It is the constitutional responsibility of the Sheriff to attend all sessions of the county circuit courts and to transport prisoners between mental health facilities and prison facilities and the Racine County courts. This requires eleven deputies to attend courts and provide security, six deputies to provide transportation to and from court hearings, a supervisor and a location specialist to coordinate the transportation.

The Department handles several types of prisoner conveyance. Long-range conveyances involve returning prisoners brought to Racine County for court appearances from the State of Wisconsin prisons or other county jails or bringing prisoners from prisons outside the county to stand trial in Racine County. Short-range conveyances involve transferring convicted prisoners to the Racine Correctional Center in Sturtevant and transporting them to and from the courts for any additional hearings.

Based on Racine County Circuit Court Activity, it was estimated that 75% of the workload for courts and conveyances is the result of City of Racine cases. It should be noted that the court and conveyance functions are a constitutional responsibility of the Sheriff and must be provided without regard to municipal boundaries, therefore, it may be inappropriate to attempt to allocate these costs to municipalities. However, to provide a conservative analysis, the Sheriff's estimates of cost allocations were utilized.

CIVIL PROCESS

Civil Process means the act of serving any writs, orders, notices, summons, or other writings issued by a court to exercise its authority over the parties or subject matter of any action or proceeding. Most of the orders served deal with non-criminal matters, and in the case of Racine County, a large part of the workload involves landlord evictions. The Sheriff's Department

serves many of the orders issued in Racine County, but private process servers may also serve them. The Department has made an effort in recent years to adjust the fee schedule to encourage the use of private process servers.

This unit employs the full-time services of one deputy, the assistance of another deputy when needed, and a civilian clerk. It was estimated that 80% of the civil process activity occurs within the City of Racine. It should be noted that the civil process function is a constitutional responsibility of the Sheriff and must be provided without regard to municipal boundaries, therefore, it may be inappropriate to attempt to allocate these costs to municipalities. However, to provide a conservative analysis, the Sheriff's estimates of cost allocations were utilized.

WARRANTS

The recently created warrants unit consists of two deputies assigned to the full-time task of executing criminal warrants and commitments issued by Racine County courts. This unit is part of the Warrants Office within the Criminal Investigations Division and works closely with the Special Enforcement Unit. The officers of this unit estimated that 90% of their time is spent on cases involving City of Racine residents. It should be noted that the warrants function is a constitutional responsibility of the Sheriff and must be provided without regard to municipal boundaries, therefore, it may be inappropriate to attempt to allocate these costs to municipalities. However, to provide a conservative analysis, the Sheriff's estimates of cost allocations were utilized.

DISPATCH CENTER

The Dispatch Center handles communication needs for the Sheriff's Department and for a large geographic area of Racine County. The Department provides dispatch service for the police departments of the Town of Burlington, the Town of Waterford, the Town of Norway, the Village of Waterford and the Village of Wind Point, for the fire/rescue departments of Wind Lake and the Town of Yorkville, the fire departments of the Towns of Burlington, Rochester, Waterford, Raymond, the unincorporated area of Kansasville and Tichigan, and the Burlington Area Rescue Department. In addition, the Department answers all 911 emergency calls for the Village of Union Grove, the Village of Waterford, the Towns of Yorkville, Raymond, Norway, Waterford, Rochester, Burlington, and Dover and all cellular 911 calls placed throughout the County. The City of Racine and the Towns of Caledonia and Mount Pleasant rely on the Sheriff's Department for backup dispatch and 911 response services.

In addition to their other communications responsibilities, Dispatch Center staff process and maintain files of all warrants, injunctions, restraining orders and other papers issued by the courts. They also activate the countywide weather alert system and monitor the radio system alarm.

The Dispatch Center is staffed with seventeen dispatchers, or five to six personnel per shift. It is estimated that approximately 8% of overall communications activity relates to the City of Racine.

DARE AND DEPUTY FRIENDLY

The Sheriff's Department offers educational services to community youth through the DARE and Deputy Friendly programs. DARE stands for Drug Awareness Resistance Education and is taught to 5th and 6th grade and middle school students to help reduce violence and drug use among young people. DARE instructors also hold soccer and basketball tournaments and appear at numerous public functions such as parades and fairs. The Sheriff's Department has one full-time deputy and one part-time deputy instructing students throughout Racine County. In 1998,

the DARE program reached 1,199 5th and 6th grade students, approximately 58% of whom attended schools east of I-94. The DARE program focuses on schools outside the City of Racine, but many City of Racine students attend schools in the Racine Unified School District located outside of the City.

The deputy assigned to the Deputy Friendly program travels to Racine County schools teaching classes on a variety of children's safety issues, including bicycle safety, pedestrian safety, school bus safety, baby sitting safety, and dangerous strangers. In 1998, Deputy Friendly taught over 620 classes and made almost 30,000 individual contacts. Deputy Friendly teaches in 12 schools east of I-94, many of which are attended by City of Racine children.

It was estimated by the DARE and Deputy Friendly deputies that approximately 10% of the students reached by these programs are City of Racine residents.

RECORDS BUREAU

The Records Bureau performs four major functions: computerizing, maintaining and storing all records generated by the Sheriff's Department, fingerprinting and photographing, responding to information requests, and reporting crime, arrest and accident information. The records maintained by the bureau include incident reports, investigative reports, correspondence, accident reports, photographs, inventory sheets, citations, and jail records, among others.

The Bureau also fingerprints and photographs noncustody defendants, sex offender registrants and citizens requiring special licenses or certifications. Many of the individuals fingerprinted and photographed have been ordered to have this done as a condition of signature bond release by the courts. This allows these subjects to be released without having to be booked through the County Jail. This service is also used by other area police departments to process those individuals that have been arrested but who will not be booked into the County Jail. The City of Racine relies heavily on this service since the Racine Police Department no longer does fingerprinting and photographing at its own facilities.

In addition to these activities, the Records Bureau provides information such as jury checks, open records requests and criminal history checks and reports information to the proper state and federal agencies.

Based on the use of the fingerprinting and photographing services, it is estimated that 15% of the services provided by the Records Bureau directly benefit the City of Racine.

SPECIAL INVESTIGATIVE UNIT (WELFARE FRAUD)

The Wisconsin Department of Workforce Development contracts with the Sheriff's Department Welfare Fraud Unit to investigate cases of welfare fraud in Racine County. The unit works from the Taylor Avenue Workforce Development Center in the City of Racine and conducts investigations on behalf of the Racine County Human Services Department, the County's designated W-2 agency. The purpose of the investigations is to determine whether welfare recipients intentionally misrepresented facts for the purposes of obtaining or maintaining benefits for which they were not eligible. In addition to investigation, the unit provides security for visiting dignitaries or government officials and for interviews with potentially dangerous or threatening welfare recipients.

The State of Wisconsin and the federal government fund part of the unit's operating budget, with the remainder funded by Racine County. The staff consists of one sergeant and three investigators, who estimate that 85% of their caseload involves City of Racine residents. It should be noted that the special investigative unit (welfare fraud) function is a constitutional

responsibility of the Sheriff and must be provided without regard to municipal boundaries, therefore, it may be inappropriate to attempt to allocate these costs to municipalities. However, to provide a conservative analysis, the Sheriff's estimates of cost allocations were utilized.

WATER PATROL

The water patrol unit consists of one sergeant, four deputies and six or seven part-time summer employees. The primary responsibilities of the unit are to patrol the waters of Lake Michigan and the inland waters of Racine County from April to November and to patrol schools throughout Racine County during the winter months.

While on water patrol, the unit responds to calls for help, enforces boating laws, helps maintain the orderly operation of Racine Harbor and assists other agencies with operations such as fire fighting, body recovery, spill containment, and search and rescue. In addition, the unit maintains equipment in Racine Harbor, such as signage and navigation aids, inspects boats, teaches boating safety courses, attends boating events and meetings, and maintains its own boats and equipment.

During the winter months, the unit patrols middle schools in the Racine Unified School District and middle and high schools in the western half of the county. This program is designed to create a positive law enforcement presence in schools to deter potential problems, decrease trespassing, and improve communication between law enforcement and school officials and between law enforcement and students.

Because of the lack of data on where the Boater and Students for Boater Safety and Sailing School come from, it was difficult to determine a percentage of the activities to attribute to the City of Racine. The boat patrols also cover areas of shoreline along Mt. Pleasant, Caledonia, Wind Point and North Bay. A review of customers at one large marina shows that approximately ten percent of the boats docked are owned by City of Racine residents. Many of the boats are also registered to Illinois residents. Based on the data reviewed, a conservative estimate would be that 40% of the units activity benefits the City of Racine.

CHILD SUPPORT

The child support unit consists of one deputy who works with the County Child Support Department to apprehend persons in violation of child support orders. This unit is part of the Warrants Office section of the Criminal Investigations Unit. The officer assigned to this unit estimates that 90% of the caseload involves City of Racine residents.

COUNTY JAIL

The County Jail is the single largest operation of the Racine County Sheriff's Department, both in terms of budget and staff. The jail staff consists of 125 deputies and civilian personnel, including supervisors, deputies, correction clerks, clerical support staff, nurses and cooks. The jail holds inmates for other law enforcement agencies in the county, retains individuals for the courts after their initial court appearance, and holds those who have violated the conditions of their probation and parole. During 1997 and 1998, the County also rented a limited number of jail beds to Kenosha County and the U.S. Immigration and Naturalization Service. The current capacity of the jail is 650 beds and the 1998 average daily population of 645 placed the jail at or above capacity on a regular basis.

The City of Racine benefits greatly from the County Jail in several ways. First, a large percentage of the inmates in the jail are City of Racine residents. A count of inmates taken on June 2, 1999 found that 387 inmates, or 66% of the Racine County inmates, were City of Racine residents. The Sheriff's Department believes that this figure accurately approximates the

average percentage of inmates from the City of Racine. This means that the County is holding City residents that might otherwise be free to commit further crimes, probably within the City. The location of the jail within the City of Racine makes it convenient for the Racine Police Department to bring arrestees to the jail for booking and holding prior to their appearance in court. In fact, the City does not operate a holding facility of its own, which is unusual for a city of its size. This contributes to the high percentage of jail inmates being City of Racine residents.

Based on the percentage of inmates from the City of Racine, it was estimated that 66% of the services provided by the jail benefit the City.

It should be noted that the County Jail function is a constitutional responsibility of the Sheriff and must be provided without regard to municipal boundaries. Therefore, it may be inappropriate to attempt to allocate these costs to municipalities. However, the City of Racine does receive certain specific benefits from the jail which other municipalities in Racine County do not. These relate to the City's use of the County Jail as a holding facility. For this analysis, a conservative estimate was arrived at by utilizing the Sheriff's estimates.

METRO DRUG UNIT

The Metro Drug Unit is a part of the Criminal Investigations Division focusing on drug investigations. The unit is staffed with one sergeant, three investigators and a civilian clerk from the Racine County Sheriff's Department, one officer from the City of Burlington Police Department and one officer from the Town of Caledonia Police Department. Their respective employers pay the Burlington and Caledonia officers' wages.

The primary responsibility of the unit is to investigate and arrest anyone trafficking in illegal drugs. During 1998, the unit responded to 338 complaints and 473 intelligence reports and made total of 209 arrests. Approximately 55% of the incidents responded to occurred in the City of Racine. Based on number of incidents occurring in the City, as well as the complexity of the investigations, the unit estimated that it spends approximately 70% of its time in the City of Racine.

ALLOCATION OF COSTS BY SERVICE AREA

The Sheriff's Department provided estimates of the share of each of its services that directly benefits the City and its 1998 net expenditures for each type of service. The Department is not required to provide a detailed accounting of services by community served. Nor is it responsible for providing a complete departmental cost allocation by community since municipalities in the county contribute to departmental costs on the basis of equalized value rather than amount of benefit received. However, from the information available, reasonable estimates can be developed of the costs of providing services that benefit the City. To develop the cost estimates, it was assumed that the share of costs allocated to the City for each type of service was equal to the estimated percentage share of benefits of the service received by the City. The activities performed in the City or on behalf of City residents may actually cost the Sheriff's Department more or less than similar activities or services provided for other residents of the County. However, since a detailed accounting of the actual cost of each service or activity is not available, this analysis used the average cost of providing each type of service. For example, if a particular service unit spends ten percent of its time serving the City, then ten percent of the costs for that service were allocated to the City.

The description of each Sheriff's Department service included an estimate of the percentage of the service that benefited the City of Racine. This information, along with the 1998 net expenditures for each service, is summarized in Table 1. The total Sheriff's Department net expenditures for 1998 were approximately \$14.2 million. Based on the estimate of the benefits

received by the City, the cost of services provided to the City totaled approximately \$5.8 million, or 41% of the Department's net expenditures.

<u>CITY OF RACINE CONTRIBUTION TO THE RACINE COUNTY SHERIFF'S</u> DEPARTMENT

The City of Racine clearly receives substantial benefits from the services offered by the Sheriff's Department. The City, however, also contributes to the operation of the Department through county property taxes paid by City residents. The question to be answered by this report is how does the City's contribution compare to the cost of services provided to the City?

Since the City's contribution is through county property taxes, the share of the Department's expenditures paid for by the City is equal to the City's share of the total equalized property value in the County. Property taxes collected in 1998 were based on 1997 equalized property value. Table 2 shows the total equalized value by municipality in Racine County for 1997. In 1997, property in the City of Racine made up 32% of the equalized value of all property in Racine County. Thus, Racine's contribution to the Sheriff's Department net expenditures in 1998 was 32% of \$14.2 million, or about \$4.5 million, as summarized in Table 3.

CONCLUSION

In considering the findings and conclusions of this study, it is important to understand the limitations imposed by certain assumptions underlying the data presented in the tables. These include, importantly, the constitutional responsibilities of the Sheriff's Department to provide certain services on an areawide basis which may make it inappropriate to allocate attendant costs to specific municipalities. Nevertheless, such allocations were made based upon estimates provided by the Sheriff's Department. The effect of this approach was to provide a conservative estimate of the benefits received by the City of Racine from the services provided by the Sheriff's Department. More specifically in this respect, if the courts and conveyance, civil process, warrants, welfare fraud investigation and jail services provided by the Sheriff's Department are regarded as mandated areawide services, and-adjusting for special jail services provided to the City--the proportion of the cost of services provided by the Sheriff's Department to the City would be reduced from 41% to approximately 16%.

In should also be noted that the cost allocations presented are based upon judgments made by responsible personnel in the Sheriff's Department and do not have the same support of statistical data used in other areas of this study. However, it may be concluded that given the nature of the services provided and the data available, there are no major inequities in the services provided by the Sheriff's Department that need to be considered at this time.

Table 1
Racine County Sheriff's Department
1998 Net Expenditures by Activity

	Net	City of Racine Percentage	City of Racine
Activity	Expenditures	Share	Share
Sheriff	\$4,167,269	5%	\$208,363
Detective Bureau	1,057,811	13	137,515
Special Enforcement Unit	397,761	86	342,074
Courts & Conveyance	1,200,342	75	900,257
Civil Process	155,080	80	124,064
Warrants	210,001	90	189,001
Dispatch	832,853	8	66,628
D.A.R.E./Deputy Friendly	138,785	10	13,879
Records Bureau	280,562	15	42,084
Welfare Fraud	173,474	85	147,453
Water Patrol	345,859	40	138,344
Child Support	23,816	90	21,434
Jail	4,940,193	66	3,260,527
Metro Drug Unit	290,703	70	203,492
Total	\$14,214,509	41%	\$5,795,115

Table 2
Total 1997 Equalized Value of Municipalities in Racine County

	1997 Equalized	Percentage of
Municipality	Value	County EV
T. Burlington	\$335,656,700	4.4%
T. Caledonia	1,040,599,200	13.7
T. Dover	178,247,000	2.3
T. Mount Pleasant	1,251,165,900	16.5
T. Norway	386,134,600	5.1
T. Raymond	209,318,700	2.8
T. Rochester	113,795,200	1.5
T. Waterford	320,768,500	4.2
T. Yorkville	217,073,100	2.9
V. Elmwood Park	27,345,600	0.4
V. North Bay	23,175,900	0.3
V. Rochester	42,521,800	0.6
V. Sturtevant	163,337,400	2.1
V. Union Grove	143,637,400	1.9
V. Waterford	146,258,300	1.9
V. Wind Point	166,329,000	2.2
C. Burlington	436,525,300	5.7
C. Racine	2,397,885,100	31.6
Total	\$7,599,774,700	100.0%

Table 3 Racine County Sheriff's Department 1998 Net Expenditures City of Racine Contribution Versus Benefits Received

Racine County Sheriff's Department 1998 Net Expenditures	\$14,214,509
City of Racine Share of 1997 County Equalized Value	32%
Share of Sheriff's Department Expenditures Contributed by the City of Racine in 1998	\$4,484,970
City of Racine Benefit from County Sheriff's Services in 1998	\$5,795,115
City of Racine Benefit Share of 1998 Services	41%

APPENDIX 7

ANALYSIS OF THE FISCAL IMPACTS ASSOCIATED WITH THE EASTERN RACINE COUNTY JURISDICTIONAL HIGHWAY TRANSFERS RECOMMENDED IN THE REGIONAL SYSTEM PLAN

ANALYSIS OF THE FISCAL IMPACTS ASSOCIATED WITH THE EASTERN RACINE COUNTY JURISDICTIONAL HIGHWAY TRANSFERS RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN

In 1997, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) published a report entitled A Regional Transportation System Plan for Southeastern Wisconsin: 2020. This report analyzed the state, county and local highway networks of counties in Southeastern Wisconsin and made recommendations regarding functional improvements and jurisdictional changes for certain segments of the system. The recommended jurisdictional transfers include some transfers of local or county highways to State jurisdiction, as well as transfers of highways between county and local units of government. The recommended improvements and jurisdictional changes were designed to support desirable land use patterns, reduce traffic congestion while minimizing the investment needed for additional highway capacity, promote efficient planning and multi-jurisdictional management of the total arterial street and highway system and produce a more equitable distribution of the costs of maintaining and constructing the region's highway system. The jurisdictional transfers were recommended based on the expected future function of each segment within the arterial highway system, with the intent that all facilities serving similar functions would be under the jurisdiction of the same level of government. For example, if roads currently classified as local streets provide intercommunity service, or are expected to provide such service in the future, it is recommended that the county, rather than the local unit of government, take responsibility for the operation, maintenance and construction of that street. This would result in a more equitable distribution of costs, since local governments would then be responsible only for streets providing primarily local service and land access within the municipality, while the county would be responsible for roads providing service between municipalities and the State would have jurisdiction for roads providing intercounty service.

Changes in jurisdictional responsibility for highways may involve significant changes in fiscal responsibility for the municipalities involved. Although a region or a county may benefit overall by implementing the plan, fiscal costs and benefits are likely to be distributed unevenly among individual municipalities. For this reason, the municipalities in Eastern Racine County asked Ruekert/Mielke to quantify the expected fiscal impacts on Racine County and each municipality of implementing the recommended jurisdictional transfers for Eastern Racine County. The analysis is based on the transfers recommended in <u>A Regional Transportation System Plan for Southeastern Wisconsin: 2020</u> and uses methods similar to those used to calculate the fiscal impacts for Waukesha County municipalities in the <u>Waukesha County Jurisdictional Highway System Plan—2010</u>, published by SEWRPC in December, 1995.

This report examines only the fiscal impacts on county and local governmental units of making the jurisdictional transfers for highways located in Eastern Racine County. This means that while the analysis includes all fiscal impacts for the local units of government, it reflects only the partial impacts of the plan for Racine County. If the plan were to be adopted for the entire county, the fiscal impact for Racine County could be significantly different. In addition, no fiscal impact analyses regarding the state level of government were made.

ASSUMPTIONS

For purposes of this report, the following assumptions were used in the analysis:

Period of Analysis

A twenty-year period of analysis, from 2000 to 2020, was used for this report to coincide with the planning horizon of the regional transportation system plan. All costs and revenues are expressed as average annual costs over the twenty-year period in terms of constant 1999 dollars.

Timing of Transfers

Although the implementation period is twenty years, it is assumed that all transfers will take place immediately and simultaneously. This assumption is used so that the fiscal impacts of transfers can be evaluated based on current civil division limits. It would be difficult to predict all changes in civil division limits over the next twenty years, and such changes could have significant impacts on the distribution of fiscal impacts between municipalities. Although transfers may not take place immediately, it is expected that the relative magnitude of the fiscal impacts will be the same, expressed in 1999 dollars, regardless of when they take place during the twenty-year period, provided there are no changes in civil division limits.

Operation, Maintenance and Construction Costs

Operation and maintenance costs per mile are based on each unit of government's total maintenance costs per year for the period 1992 to 1997, as reported to the Wisconsin Department of Transportation for purposes of General Transportation Aid calculations. As shown in Appendix 1, the total average costs per year were converted to a cost per mile for three general categories of roads based on existing Wisconsin Department of Transportation functional classifications: local streets, collector highways and arterial highways. The average costs per mile for maintaining collector highways and arterial highways were assumed to be twice and four times the cost for maintaining local non-arterial streets, respectively.

Capital costs per mile were based on typical construction costs per mile for preservation, improvement or new construction as supplied by SEWRPC and shown in Appendix 2.

All costs for operation and maintenance and construction assumed that the highways would be improved as recommended in the plan and would function as indicated in the plan regardless of whether the jurisdictional transfers took place. For example, if the plan recommended that a roadway be widened to four lanes and function as an arterial highway, then the assumed O&M and capital costs would be based on improving the highway and operating it as an arterial highway.

State and Federal Transportation Aids

The average level of reimbursement for transportation expenditures through the State General Transportation Aids program was assumed to remain at the same percentage reimbursement as received in 1999. The funding level provided through the State's General Transportation Aids program for a given year is based upon a six-year average of a municipality's highway expenditures. Racine County was assumed to continue receiving reimbursement for 26.83% of its expenditures, and the municipal reimbursement rate was assumed to remain at 21.37%, the average rate for municipalities in Eastern Racine County in 1999, as shown in Appendix 3.

The level of federal and state capital aid per mile was estimated based on 1999 funding levels for the Federal Surface Transportation Program and the State Local Bridge Program, as shown in Appendix 4. These figures are only estimated entitlements. Since these funding programs are competitive, the actual level of funding received by a particular unit of government could vary significantly from year to year.

Responsibility for Capital Costs

For transfers from a local unit of government to the county or the state, or for transfers from the county to the state, it was assumed that the receiving unit of government would assume responsibility for the capital costs of preserving or improving the roadway. For transfers from the county to a local unit of government, it was assumed that the county would recondition or

improve the roadway prior to transferring it the local government. After the 20 year implementation period, the unit of government having jurisdiction for the road would be responsible for future capital expenditures.

FISCAL IMPACTS BY TYPE OF TRANSFER

Since the plan recommends several types of jurisdictional transfers, this report describes the impacts of each type before summarizing the net fiscal impacts by municipality. It should be noted that the positive and negative fiscal impacts for all units of government in the county will not sum to zero. This is true for three reasons. First, there are some jurisdictional transfers to the State of Wisconsin and this report does consider the increased cost to the State. Next, state aid reimbursements are higher for counties than for cities, villages and towns. Therefore a transfer between the county and a municipality would change the amount of state aid received and result in a net overall fiscal impact. Also, the unit maintenance costs used in the analysis are different for each municipality and the county.

Jurisdictional Transfers to the State of Wisconsin

The transportation plan proposes the transfer of a total of 12.49 miles of highway in Eastern Racine County to the jurisdiction of the State of Wisconsin. The transfers consist of 11.85 miles of arterial roads and .64 miles of non-arterial roads. The transfers include 1.55 miles of Yout Street in the City of Racine, .91 miles of which is currently classified as arterial highway (Table 1) and .64 miles of which is classified as a local non-arterial street (Table 2). The plan also includes the transfer of 10.94 miles of arterial highways currently under county jurisdiction, as shown in Table 1. Since all of these transfers are from the county or a local unit of government to the State, it is assumed that the State would complete the reconditioning or functional improvements of these highways after the transfer. Therefore the county or the municipality would save the capital costs that would otherwise be required. As shown in Tables 1 and 2, the City of Racine would save an average of \$88,600 per year by making these transfers, while Racine County would save an average of \$552,900 per year.

<u>Jurisdictional Transfers from Local Government Units to Racine County</u>

The plan also calls for transfers of several highway segments from local jurisdiction to county jurisdiction. As with the transfers to the State, it was assumed that the County would take responsibility for all reconditioning or functional improvements of the transferred roadways after the transfer. Table 3 shows the miles of roads currently classified as local arterial to be transferred to Racine County, by municipality. The category of arterial includes roads classified as either a collector highway or an arterial highway. A total of 12.65 miles of local arterials would be transferred to county jurisdiction, 5.12 miles from the City of Racine and 7.53 miles from the Town of Caledonia. This would result in net savings of \$339,100 per year to the City of Racine and \$204,000 per year to the Town of Caledonia. The savings per mile vary by municipality due to differences in historical expenditures per mile. Extra costs of approximately \$423,600 per year to the County would result from these transfers.

If the plan were to be implemented, the County would also receive approximately 6.5 miles of roads currently classified as local non-arterial streets. As shown in Table 4, the transfer of 6.01 miles from the Town of Raymond and .49 miles from the Town of Yorkville would save these towns \$157,300 per year and \$6,600 per year, respectively. This would result in additional costs to the County of approximately \$150,900 per year.

Jurisdictional Transfers from Racine County to Local Units of Government

The plan also proposes jurisdictional transfers in the opposite direction—from the County to local units of government. For these transfers, it was assumed that the County would complete the necessary reconditioning or improvements prior to transferring the highway segment. Thus, the County would be responsible for all capital costs regardless of whether the transfer took place, and in the event of a transfer the local unit of government would not be responsible for capital costs during the twenty-year implementation period.

Tables 5 and 6 show the fiscal impacts of transferring county highways to local units of government. Table 5 shows the impact of transferring 4.37 miles from county to local arterial status. The Town of Caledonia would receive 2.91 miles of county highway, resulting in a net increase of \$42,600 per year in operation and maintenance costs. The Town of Mount Pleasant would add 1.46 miles of roadway to its arterial highway system resulting in additional operation and maintenance costs of approximately \$34,000 per year. The transfer of 4.37 miles from county to local arterial status would save Racine County approximately \$76,000 per year.

Table 6 shows the fiscal impact of transferring 14.66 miles of county highways to local non-arterial status. The Town of Caledonia would receive 5.02 miles of highway at an additional cost of \$18,400 per year. The Town of Mount Pleasant would receive 2.49 miles of highways currently under county jurisdiction, adding approximately \$14,500 per year in operation and maintenance costs. The Town of Raymond would take jurisdiction of 7.15 miles of county highway, at a cost of \$31,100 per year for operation and maintenance. The County would save \$63,700 per year as a result of these transfers.

In total, the plan recommends that Racine County transfer 19.03 miles of county highway to local units of government, for savings of approximately \$139,700 per year to the County.

Construction of New Highway Segments

In addition to the jurisdictional transfers and functional improvements to existing roadways, the transportation plan proposes the extension of some existing streets and highways. The costs of constructing these new roadway segments are not included in the analysis of the fiscal impacts of jurisdictional transfers, since no transfer of an existing highway segment and its associated operation, maintenance and capital costs would take place. However, this report does include an estimate of the costs to each municipality of constructing and maintaining the new roadway segments recommended in the plan. It is assumed that such costs would be borne by the government entity currently having jurisdiction over the highway at the point at which the new segment would begin, or by the municipality in which the new segment would be located, if the new segment begins at a municipal boundary. The functional classification and cross section of the new segments were assumed to be the same as the segment of road being extended, unless specified otherwise by the transportation plan.

As shown in Table 7, the plan recommends the construction of 8.53 miles of new roadways. This includes 1.8 miles within the City of Racine, 1.5 miles within the Town of Caledonia, and 5.23 miles within the Town of Mount Pleasant. The construction of these segments would result in additional operation, maintenance and capital costs of \$241,700 per year for the City of Racine, \$102,700 per year for the Town of Caledonia, and \$610,000 per year for the Town of Mount Pleasant.

Net Impacts of the Jurisdictional Transfers

The overall impact to the County and to each municipality can be seen by summing the fiscal impacts of each type of jurisdictional transfer discussed above.

As shown in Table 8, the City of Racine currently operates and maintains 240.05 miles of local streets and roads. The transfers recommended by the plan would delete 6.03 miles of arterial streets and .64 miles of non-arterial streets from the City's system, for a total decrease of 6.67 miles. The City would not receive jurisdictional transfer of any county highways. The net impact would be an annual savings of approximately \$427,700 in operation, maintenance and capital costs.

The Town of Caledonia would have a small increase in its local highway system, as shown in Table 9. Under the plan, the Town would transfer 7.53 miles of local arterial highways to the County and take jurisdiction of 7.93 miles of arterial highways currently under county jurisdiction, for a net increase of .4 miles. This would result in savings of approximately \$143,000 per year to the Town.

As indicated in Table 10, the Town of Mount Pleasant would not transfer any of its highways to county or state jurisdiction, and would add 3.95 miles from the county. This would result in total local highway system of 108.46 miles and a modest increase of \$48,500 per year in operation and maintenance costs.

The Town of Raymond would also experience a small increase in the miles of highways under its jurisdiction, as shown in Table 11. The Town would transfer 6.01 miles of local non-arterial highways to Racine County and would receive 7.15 miles of non-arterial highway from the county, for a net increase of 1.14 miles of local non-arterial highways. Although adding to its highway system, the Town would experience savings of approximately \$126,200 per year due the fact that the County would recondition or improve the roadways before transferring them to the Town, while the Town would not be responsible for capital improvements to roads transferred to the County.

The Town of Yorkville would transfer a small segment of non-arterial highway to the County, as shown in Table 12. This transfer of .49 miles would result in savings of \$6,600 per year. No other transfers are recommended for the Town of Yorkville.

The plan does not recommend the transfer of any streets located in the Villages of Elmwood Park, North Bay, Sturtevant or Wind Point.

The plan recommends a net decrease of 10.82 miles in the current Racine County highway system. As shown in Table 13, this includes the transfer of 10.94 miles to the State, and the transfer of 19.03 miles of highways to local units of government. In total, the County would delete 29.97 miles from the 161.06 miles of highway currently under its jurisdiction, for a total saving of approximately \$692,600 per year. The County would add 12.65 miles of highways currently classified as local arterial highways and 6.5 miles of highways currently classified as local non-arterial streets or roads. This addition of 19.15 miles of roadway would cost the County approximately \$574,500 per year. The net result of all the transfers would be a reduction of 10.82 miles in the County highway system and annual savings of \$118,100.

CONCLUSION AND RECOMMENDATION

The net changes in mileage and fiscal impacts associated with the jurisdictional transfers recommended in the plan are summarized in Table 14. As shown, Racine County and most of the municipalities in Eastern Racine County would receive a net fiscal benefit from the proposed jurisdictional transfers. The City of Racine, which has the largest street and road network, would experience the largest fiscal benefit. The towns of Caledonia and Raymond would also receive significant fiscal benefits from the transfers. Racine County and the Town of Yorkville would receive modest benefits, and the Town of Mount Pleasant would experience a modest increase in its annual highway expenditures. Altogether, the county and local units of government would

have jurisdictional responsibilities for 12.49 fewer miles of streets and roads following the transfers. These 12.49 miles represent the total miles of roads that would be transferred to the State of Wisconsin from Racine County and the City of Racine. All other recommended transfers would shift the distribution of fiscal responsibility between units of government within Racine County. The total savings to Racine County and local units of government in Eastern Racine County would be approximately \$773,100 per year if all recommended transfers were implemented.

Since the transfers proposed in the regional transportation system plan would produce both operational and fiscal benefits to the county and local units of government, it is recommended that Racine County and the municipalities in Eastern Racine County consider implementation of the plan.

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TABLE 1
ESTIMATED FISCAL IMPACTS OF TRANSFERRING ARTERIAL HIGHWAYS IN EASTERN RACINE
COUNTY TO THE STATE

Unit of Government:	Miles	Annual O&M Costs ⁽¹⁾	Annual Capital Costs ⁽²⁾	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids ⁽⁴⁾	Net Increase / (Decrease) in Annual Costs
City of Racine	-0.91	\$46,300	\$22,200	\$2,400	\$14,100	(\$52,000)
Villages						
Elmwood Park	0.00	\$0	\$0	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	0.00	\$0	\$0	\$0	\$0	\$0
Mount Pleasant	0.00	\$0	\$0	\$0	\$0	\$0
Raymond	0.00	\$0	\$0	\$0	\$0	\$0
Yorkville	0.00	\$0	\$0	\$0	\$0	\$0
Racine County	-10.94	\$260,000	\$527,500	\$31,800	\$202,800	(\$552,900)

Total Miles Transferred: -11.85

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 3).

⁴⁾ Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities and 26.83% for Racine County (Appendix 4).

TABLE 2
ESTIMATED FISCAL IMPACTS OF TRANSFERRING NONARTERIAL HIGHWAYS IN EASTERN RACINE
COUNTY TO THE STATE

Unit of Government:	Miles	Annual O&M Costs ⁽¹⁾	Annual Capital Costs ⁽²⁾	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids (4)	Net Increase / (Decrease) in Annual Costs
City of Racine	-0.64	\$32,600	\$15,600	\$1,700	\$9,900	(\$36,600)
Villages						
Elmwood Park	0.00	\$0	\$0	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	0.00	\$0	\$0	\$0	\$0	\$0
Mount Pleasant	0.00	\$0	\$0	\$0	\$0	\$0
Raymond	0.00	\$0	\$0	\$0	\$0	\$0
Yorkville	0.00	\$0	\$0	\$0	\$0	\$0
Racine County (5)	0.00	\$0	\$0	\$0	\$0	\$0

Total Miles Transferred: -0.64

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).

⁴⁾ Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities and 26.83% for Racine County (Appendix 3).

⁵⁾ See Appendix 5 for more detailed information about County roadways transferred.

TABLE 3
ESTIMATED FISCAL IMPACTS OF TRANSFERRING ARTERIAL HIGHWAYS FROM LOCAL UNITS OF
GOVERNMENT IN EASTERN RACINE COUNTY TO RACINE COUNTY

Unit of Government:	Miles	Annual O&M Costs	Annual Capital Costs ⁽²⁾	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids ⁽⁴⁾	Net Increase / (Decrease) in Annual Costs
City of Racine	-5.12	\$260,600	\$184,100	\$13,400	\$92,200	(\$339,100)
Villages						
Elmwood Park	0.00	\$0	\$0	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	-7.53	\$140,300	\$130,900	\$11,800	\$55,400	(\$204,000)
Mount Pleasant	0.00	\$0	\$0	\$0	\$0	\$0
Raymond	0.00	\$0	\$0	\$0	\$0	\$0
Yorkville	0.00	\$0	\$0	\$0	\$0	\$0
Racine County (5)	12.65	\$300,600	\$315,000	\$36,841	\$155,200	\$423,600

Total Miles Transferred: 12.65

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).

⁴⁾ Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities (Appendix 3).

⁵⁾ See Appendix 6 for more detailed information about County roadways transferred.

TABLE 4
ESTIMATED FISCAL IMPACTS OF TRANSFERRING NONARTERIAL HIGHWAYS FROM LOCAL UNITS
OF GOVERNMENT IN EASTERN RACINE COUNTY TO RACINE COUNTY

Unit of Government:	Miles	Annual O&M Costs	Annual Capital Costs (2)	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids (4)	Net Increase / (Decrease) in Annual Costs
City of Racine	0.00	\$0	\$0	\$0	\$0	\$0
Villages						
Elmwood Park	0.00	\$0	\$0	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	0.00	\$0	\$0	\$0	\$0	\$0
Mount Pleasant	0.00	\$0	\$0	\$0	\$0	\$0
Raymond	-6.01	\$132,900	\$65,500	(\$1,700)	\$42,800	(\$157,300)
Yorkville	-0.49	\$3,000	\$5,300	(\$100)	\$1,800	(\$6,600)
Racine County (5)	6.50	\$154,400	\$70,800	\$18,900	\$55,400	\$150,900

Total Miles Transferred: 6.50

- 1) Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).
- 2) Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).
- 3) Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).
- 4) Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities and 26.83% for Racine County (Appendix 3).
- 5) See Appendix 7 for more detailed information about County roadways transferred.

TABLE 5
ESTIMATED FISCAL IMPACTS OF TRANSFERRING RACINE COUNTY HIGHWAYS
TO LOCAL UNITS OF GOVERNMENT IN EASTERN RACINE COUNTY AS ARTERIAL
HIGHWAYS

Unit of Government:	Miles	Annual O&M Costs (1)	Annual State General Transportation Aids ⁽²⁾	Net Increase / (Decrease) in Annual Costs ⁽³⁾
City of Racine	0.00	\$0	\$0	\$0
Villages Elmwood Park North Bay Sturtevant Wind Point	0.00 0.00 0.00 0.00	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0
Towns Caledonia Mount Pleasant Raymond Yorkville	2.91 1.46 0.00 0.00	\$54,200 \$43,200 \$0 \$0	\$11,600 \$9,200 \$0 \$0	\$42,600 \$34,000 \$0 \$0
Racine County (4)	-4.37	\$103,800	\$27,800	(\$76,000)

Total Miles Transferred: 4.37

- 1) Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).
- 2) Based upon an average state reimbursement rate of 21.37% for municipalities in Eastern Racine County and 26.83% for Racine County (Appendix 3).
- 3) The plan recommends that, as may be necessary, Racine County would resurface or otherwise repair an existing non-arterial county trunk highway before transferring jurisdiction to a local governmental unit. The related costs, however, would also be incurred if Racine County were to retain jurisdiction of the facilities concerned. Therefore there is no change or transfer of capital cost obligation.
- 4) See Appendix 8 for more detailed information about County roadways transferred.

TABLE 6
ESTIMATED FISCAL IMPACTS OF TRANSFERRING RACINE COUNTY HIGHWAYS TO LOCAL UNITS OF GOVERNMENT IN EASTERN RACINE COUNTY AS NONARTERIAL STREETS AND ROADS

Unit of Government:	Miles	Annual O&M Costs (1)	Annual State General Transportation Aids ⁽²⁾	Net Increase / (Decrease) in Annual Costs ⁽³⁾
City of Racine	0.00	\$0	\$0	\$0
Oity of Racine	0.00	ΨΟ	ΨΟ	ΨΟ
Villages				
Elmwood Park	0.00	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0
Towns				
Caledonia	5.02	\$23,400	\$5,000	\$18,400
Mount Pleasant	2.49	\$18,400	\$3,900	\$14,500
Raymond	7.15	\$39,500	\$8,400	\$31,100
Yorkville	0.00	\$0	\$0	\$0
Racine County (4)	-14.66	\$87,100	\$23,400	(\$63,700)

Total Miles Transferred:

14.66

- 1) Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).
- 2) Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities and 26.83% for Racine County (Appendix 3).
- 3) The plan recommends that, as may be necessary, Racine County would resurface or otherwise repair an existing non-arterial county trunk highway before transferring jurisdiction to a local governmental unit. The related costs, however, would also be incurred if Racine County were to retain jurisdiction of the facilities concerned. Therefore there is no change or transfer of capital cost obligation.
- 4) See Appendix 9 for more detailed information about County roadways transferred.

TABLE 7 ESTIMATED FISCAL IMPACT ON LOCAL UNITS OF GOVERNMENT IN EASTERN RACINE COUNTY OF CONSTRUCTING NEW HIGHWAY SEGMENTS AS RECOMMENDED IN THE REGIONAL TRANSPORTATION PLAN FOR SOUTHEASTERN WISCONSIN

Unit of Government:	Miles	Annual O&M Costs ⁽¹⁾	Annual Capital Costs ⁽²⁾	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids (4)	Net Increase / (Decrease) in Annual Costs
City of Racine	1.80	\$91,600	\$220,500	\$4,700	\$65,700	\$241,700
Villages						
Elmwood Park	0.00	\$0	\$0	\$0	\$0	\$0
North Bay	0.00	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.00	\$0	\$0	\$0	\$0	\$0
Wind Point	0.00	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	1.50	\$27,900	\$105,000	\$2,300	\$27,900	\$102,700
Mount Pleasant	5.23	\$154,700	\$627,600	\$6,500	\$165,800	\$610,000
Raymond	0.00	\$0	\$0	\$0	\$0	\$0
Yorkville	0.00	\$0	\$0	\$0	\$0	\$0
Total Miles of New Facilities:	8.53					

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).

⁴⁾ Based upon an average state reimbursement rate of 21.37% for Eastern Racine County municipalities (Appendix 3).

TABLE 8
ESTIMATED FISCAL IMPACT ON THE CITY OF RACINE OF IMPLEMENTING THE TRANSFERS
RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN
WISCONSIN

		Average Increase/(Reduction) in Annual Costs
	Number of Miles	Resulting from Transfer
Current City Highway System	240.05	
Proposed Deletions from the System		
Local Arterials to State Trunk Highway System (1)	-0.91	(\$52,000)
Local Nonarterials to State Trunk Highway System (2)	-0.64	(\$36,600)
Local Arterials to County Trunk Highway System (3)	-5.12	(\$339,100)
Local Nonarterials to County Trunk Highway System (4)	0.00	\$0
Total	-6.67	(\$427,700)
Proposed Additions to the System		
From County to Local Arterial System (5)	0.00	\$0
From County to Local Nonarterial System (6)	0.00	\$0
Total	0.00	\$0
Net Change from Current System	-6.67	(\$427,700)
Recommended Highway System	233.38	

- 1) See Table 1.
- 2) See Table 2.
- 3) See Table 3.
- 4) See Table 4.
- 5) See Table 5.
- 6) See Table 6.

TABLE 9
ESTIMATED FISCAL IMPACT ON THE TOWN OF CALEDONIA OF IMPLEMENTING THE TRANSFERS
RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN
WISCONSIN

	Number of Miles	Average Increase/(Reduction) in Annual Costs Resulting from Transfer
Current Local Highway System	135.32	
Proposed Deletions from the System		
Local Arterials to State Trunk Highway System (1)	0.00	\$0
Local Nonarterials to State Trunk Highway System (2)	0.00	\$0
Local Arterials to County Trunk Highway System (3)	-7.53	(\$204,000)
Local Nonarterials to County Trunk Highway System (4)	0.00	\$0
Total	-7.53	(\$204,000)
Proposed Additions to the System		
From County to Local Arterial System (5)	2.91	\$42,600
From County to Local Nonarterial System (6)	5.02	\$18,400
Total	7.93	\$61,000
Net Change from Current System	0.40	(\$143,000)
Recommended Highway System	135.72	

- 1) See Table 1.
- 2) See Table 2.
- 3) See Table 3.
- 4) See Table 4.
- 5) See Table 5.
- 6) See Table 6.

TABLE 10
ESTIMATED FISCAL IMPACT ON THE TOWN OF MOUNT PLEASANT OF IMPLEMENTING THE TRANSFERS RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN

	Number of Miles	Average Increase/(Reduction) in Annual Costs Resulting from Transfer
Current Local Highway System	104.51	
Proposed Deletions from the System		
Local Arterials to State Trunk Highway System (1)	0.00	\$0
Local Nonarterials to State Trunk Highway System (2)	0.00	\$0
Local Arterials to County Trunk Highway System (3)	0.00	\$0
Local Nonarterials to County Trunk Highway System (4)	0.00	\$0
Total	0.00	\$0
Proposed Additions to the System		
From County to Local Arterial System (5)	1.46	\$34,000
From County to Local Nonarterial System (6)	2.49	\$14,500
Total	3.95	\$48,500
Net Change from Current System	3.95	\$48,500
Recommended Highway System	108.46	

- 1) See Table 1.
- 2) See Table 2.
- 3) See Table 3.
- 4) See Table 4.
- 5) See Table 5.
- 6) See Table 6.

TABLE 11
ESTIMATED FISCAL IMPACT ON THE TOWN OF RAYMOND OF IMPLEMENTING THE
TRANSFERS RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR
SOUTHEASTERN WISCONSIN

	Number of Miles	Average Increase/(Reduction) in Annual Costs Resulting from Transfer
Current Local Highway System	53.30	
Proposed Deletions from the System		
Local Arterials to State Trunk Highway System (1)	0.00	\$0
Local Nonarterials to State Trunk Highway System (2)	0.00	\$0
Local Arterials to County Trunk Highway System (3)	0.00	\$0
Local Nonarterials to County Trunk Highway System (4)	-6.01	(\$157,300)
Total	-6.01	(\$157,300)
Proposed Additions to the System		
From County to Local Arterial System (5)	0.00	\$0
From County to Local Nonarterial System (6)	7.15	\$31,100
Total	7.15	\$31,100
Net Change from Current System	1.14	(\$126,200)
Recommended Highway System	54.44	

- 1) See Table 1.
- 2) See Table 2.
- 3) See Table 3.
- 4) See Table 4.
- 5) See Table 5.
- 6) See Table 6.

TABLE 12
ESTIMATED FISCAL IMPACT ON THE TOWN OF YORKVILLE OF IMPLEMENTING THE
TRANSFERS RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR
SOUTHEASTERN WISCONSIN

	Number of Miles	Average Increase/(Reduction) in Annual Costs Resulting from Transfer
Current Local Highway System	50.27	
Proposed Deletions from the System		
Local Arterials to State Trunk Highway System (1)	0.00	\$0
Local Nonarterials to State Trunk Highway System (2)	0.00	\$0
Local Arterials to County Trunk Highway System (3)	0.00	\$0
Local Nonarterials to County Trunk Highway System (4)	-0.49	(\$6,600)
Total	-0.49	(\$6,600)
Proposed Additions to the System		
From County to Local Arterial System (5)	0.00	\$0
From County to Local Nonarterial System (6)	0.00	\$0
Total	0.00	\$0
Net Change from Current System	-0.49	(\$6,600)
Recommended Highway System	49.78	

- 1) See Table 1.
- 2) See Table 2.
- 3) See Table 3.
- 4) See Table 4.
- 5) See Table 5.
- 6) See Table 6.

TABLE 13
SUMMARY OF THE ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF IMPLEMENTING THE TRANSFERS RECOMMENDED FOR EASTERN RACINE COUNTY IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN

	Number of Miles	Average Increase/(Reduction) in Annual Costs Resulting from Transfer
Current County Trunk Highway System	161.06	
Current County Trunk Highway Cystem	101.00	
Proposed Deletions from the System		
To State Trunk Highway System (1)	-10.94	(\$552,900)
To Local Arterial System (2)	-4.37	(\$76,000)
To Local Nonarterial System (3)	-14.66	(\$63,700)
Total	-29.97	(\$692,600)
Proposed Additions to the System		
From State Trunk System	0.00	\$0
From Local Arterial System (4)	12.65	\$423,600
From Local Nonarterial System (5)	6.50	\$150,900
Total	19.15	\$574,500
Net Change from Current System	-10.82	(\$118,100)
Recommended County Trunk Highway System	150.24	

- 1) See Table 2.
- 2) See Table 5.
- 3) See Table 6.
- 4) See Table 3.
- 5) See Table 4.

TABLE 14
SUMMARY OF THE ESTIMATED FISCAL IMPACT ON RACINE COUNTY AND LOCAL UNITS OF GOVERNMENT IN EASTERN RACINE COUNTY OF IMPLEMENTING THE TRANSFERS RECOMMENDED IN THE REGIONAL TRANSPORTATION SYSTEM PLAN FOR SOUTHEASTERN WISCONSIN

	Net	
	Increase /	Net Increase /
	(Decrease)	(Decrease) in
Unit of Government:	in Miles	Annual Cost
City of Racine	-6.67	(\$427,700)
Villages		
Elmwood Park	0.00	\$0
North Bay	0.00	\$0
Sturtevant	0.00	\$0
Wind Point	0.00	\$0
Towns		
Caledonia	0.40	(\$143,000)
Mount Pleasant	3.95	\$48,500
Raymond	1.14	(\$126,200)
Yorkville	-0.49	(\$6,600)
Racine County	-10.82	(\$118,100)
Net	-12.49	(\$773,100)

Appendix 1
Average Annual Reported Maintenance Expenditures, 1992-1997

Unit of Government	Total Average Annual Maintenance Costs (1)	Total Weighted Miles of Local Roads Under Jurisdiction (2)	Maintenance Cost per Mile of Local Road (2)	Maintenance Cost per Mile of Collector Road (2)	Maintenance Cost per Mile of Arterial Road (2)
Offic of Government	00313	Julisalotion	Local Noad	Odlicator Road	rtoau
Racine County	\$2,338,765	393.71	\$5,940	\$11,881	\$23,761
City of Racine	\$4,691,588	368.67	\$12,726	\$25,451	\$50,903
Villages					
Elmwood Park	\$8,668	3.59	\$2,415	\$4,829	\$9,658
North Bay	\$32,090		\$23,423		\$93,693
Sturtevant	\$297,655		·	\$27,084	
Wind Point	\$69,978	15.21	\$4,601	\$9,202	\$18,403
Towns					
Caledonia	\$837,526	179.81	\$4,658	\$9,316	\$18,631
Mount Pleasant	\$905,670				\$29,583
Raymond	\$294,760	53.30	\$5,530	\$11,060	\$22,121
Yorkville	\$76,333	50.27	\$1,518	\$3,037	\$6,074

- 1) Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 3).
- 2) Each segment of road was weighted based on the Wisconsin Department of Transportation functional classification of facilities for purposes of estimating the average operation and maintenance cost per mile of local nonarterial street. The cost to operate and maintain a mile of arterial road was estimated to be four times the cost of maintaining a nonarterial street, and the cost of maintaining a collector street was estimated to be twice the cost of maintaining a nonarterial street. This estimating technique was necessary because there are no available cost-accounting data separating the operation and maintenance costs for arterial and collector roadways from costs for operating and maintaining nonarterial streets.

Appendix 2
Estimated Annual Construction Costs per Mile to Implement the Improvements
Recommended in the Regional Transportation System Plan for Southeastern
Wisconsin in 1999 Dollars

		Preservation (1)	Improvement and Expansion (1)		
	Resurfacing	Reconstruction to Same Capacity	Total Preservation Costs ⁽²⁾	Reconstruction with Additional Capacity	New Construction
Urban 4 lane undivided 4 lane divided 6 lane divided	\$12,000 \$12,500 \$17,500	\$95,000 \$100,000 \$115,000	\$24,450 \$25,625 \$32,125	\$100,000 \$120,000 \$130,000	\$120,000 \$135,000 \$155,000
Rural 2 lane 4 lane	\$5,500 \$11,500	\$41,500 \$65,000	\$10,900 \$19,525	 \$90,000	\$70,000 \$105,000

- 1) Costs for preservation, improvement and expansion are averaged over a period of 20 years.
- 2) Each facility recommended for preservation should be assigned a cost including 85 percent of the appropriate resurfacing cost and 15 percent of the appropriate reconstruction cost. Thus, the preservation cost per mile of a 4 lane undivided urban facility would be ((0.85 * \$12,000) + (0.15 * \$95,000)), or \$24,450.

Source: SEWRPC

Appendix 3
State General Transportation Aids Paid to Local Governments in Racine County, 1999

										neral Transp	
	Total Miles of	Average	Annual Repo	rted Expendit	ures, 1992-1	1997 ⁽¹⁾	Reported Cost per Mile		Received, 1999 (1)		
Unit of Government	Streets, Roads and Highways Under Local Jurisdiction	Maintenance	Construction	Police	Other	Total	Maintenance	Total	Total	State Aid Received per Mile	Percent of Total Expenditures Reimbursed
Racine County	161.06	2,338,765	412,517	3,913,232	20,765	6,685,279	14,521	41,508	1,793,329	11,135	26.83%
City of Racine	240.05	4,691,588	2,019,159	5,558,510	1,397,611	13,666,868	19,544	56,933	2,907,020	12,110	21.27%
Villages Elmwood Park North Bay Sturtevant Wind Point	2.45 1.37 17.65 12.84	32,090	0 879,979	0 11,438 479,760 39,715	225,075	31,219 55,917 1,882,469 266,813	23,423 16,864	12,742 40,815 106,655 20,780	10,914 11,115 352,484 60,978	8,113 19,971	19.88% 18.72%
Towns Caledonia Mount Pleasant Raymond Yorkville	135.32 104.51 53.30 50.27	837,526 905,670 294,760 76,333	924,530 32,346	778,824 762,356 263 1,568		3,129,602 2,622,107 327,066 243,502	8,666	23,127 25,090 6,136 4,844	679,152 562,216 85,067 80,231	-,	21.44% 26.01%
Municipal Total	617.76	7,214,268	5,217,346	7,632,433	2,161,515	22,225,562	11,678	35,978	4,749,176	7,688	21.37%
Total	778.82	9,553,033	5,629,863	11,545,665	2,182,281	28,910,841	12,266	37,121	6,542,505	8,401	22.63%

¹⁾ Data from the "Calendar 1998 Highway Aids Payments for Racine County", Wisconsin Department of Transportation, Bureau of Transit and Local Roads.

Appendix 4
Estimated Average Federal and State Capital Aids per Year by Municipality, in Constant 1999 Dollars

	Total Miles of		Surface Transportation Program					
	Streets, Roads				5,000 -	RuralAreas		
	and Highways	Local Bridge	Milwaukee	Urban	20,000	under 5,000		Aids per
Unit of Government	Under Local	Program ⁽¹⁾	Urban Area	Racine	Population	Population (2)	Total	Mile
Racine County	161.06	\$45,982	\$46,855	\$129,880	\$7,461	\$238,881	\$469,058	\$2,912
City of Racine	240.05	\$68,533		\$559,874			\$628,407	\$2,618
Villages								
Elmwood Park	2.45	\$0		\$3,820			\$3,820	\$1,559
North Bay	1.37	\$391					\$391	\$285
Sturtevant	17.65	\$0		\$18,317			\$18,317	\$1,038
Wind Point	12.84	\$3,666		\$23,900			\$27,565	\$2,147
Towns								
Caledonia	135.32	\$38,633	\$29,773	\$143,495			\$211,900	\$1,566
Mount Pleasant	104.51	\$29,837		\$100,202			\$130,039	\$1,244
Raymond	53.30	\$15,217					\$15,217	\$285
Yorkville	50.27	\$14,352					\$14,352	\$285

¹⁾ For purposes of this analysis, each municipality's average annual funding through the Local Bridge Program is estimated based on the municipality's percentage share of total roadway miles in the County. Elmwood Park and Sturtevant are excluded from the total roadway miles and from the allocation of the funding because neither of these municipalities have a bridge located within their boundaries and would therefore not be eligible for funding.

²⁾ Funding for the Surface Transportation Program--Rural is allocated by Racine County. While roads under municipal jurisdiction may be eligible for STP-R funds, it is assumed for this analysis that the funds will be used for county road projects.

APPENDIX 5
ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF TRANSFERRING JURISDICTION OVER EASTERN RACINE COUNTY ARTERIAL HIGHWAYS FROM RACINE COUNTY TO THE STATE OF WISCONSIN

Location of Transferred Highway:	Miles	Annual O&M Cost	Annual Capital Cost	Federal & State Capital Aids (3)	State General Transportation Aids (4)	Net Annual Reduction in Cost
City of Racine	0	\$0	\$0	\$0	\$0	\$0
Villages						
Elmwood Park	0	\$0	\$0	\$0	\$0	\$0
North Bay	0	\$0	\$0	\$0	\$0	\$0
Sturtevant	0	\$0	\$0	\$0	\$0	\$0
Wind Point	0	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	-4.73	\$112,400	\$431,300	\$13,800	\$142,200	(\$387,700)
Mount Pleasant	-0.39	\$9,300	\$32,800	\$1,100	\$11,000	(\$30,000)
Raymond	-5.82	\$138,300	\$63,400	\$16,900	\$49,600	(\$135,200)
Yorkville	0.00	\$0	\$0	\$0	\$0	\$0
Total Miles Transferred						
from County to State:	-10.94	\$260,000	\$527,500	\$31,800	\$202,800	(\$552,900)

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin Department of Transportation historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).

⁴⁾ Based upon a state reimbursement rate of 26.83% for Racine County (Appendix 3).

APPENDIX 6
ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF TRANSFERRING JURISDICTION OVER EASTERN RACINE COUNTY LOCAL ARTERIAL HIGHWAYS TO RACINE COUNTY

Unit of Government Transferred From:	Miles	Annual O&M Cost	Annual Capital Cost	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids ⁽⁴⁾	Net Annual Increase in Cost
City of Racine	5.1	\$121,700	\$184,100	\$14,900	\$78,000	\$212,900
Villages						
Elmwood Park	0.0	\$0	\$0	\$0	\$0	\$0
North Bay	0.0	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.0	\$0	\$0	\$0	\$0	\$0
Wind Point	0.0	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	7.53	\$178,900	\$130,900	\$21,900	\$77,200	\$210,700
Mount Pleasant	0.0	\$0	\$0	\$0	\$0	\$0
Raymond	0.0	\$0	\$0	\$0	\$0	\$0
Yorkville	0.0	\$0	\$0	\$0	\$0	\$0
Total Miles Transferred from						
Local Units of Government:	12.65	\$300,600	\$315,000	\$36,841	\$155,200	\$423,600

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 4).

⁴⁾ Based upon a state reimbursement rate of 26.83% for Racine County (Appendix 3).

APPENDIX 7
ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF TRANSFERRING JURISDICTION OVER EASTERN RACINE COUNTY LOCAL NONARTERIAL HIGHWAYS TO RACINE COUNTY

Unit of Government Transferred From:	Miles	Annual O&M Cost	Annual Capital Cost	Annual Federal & State Capital Aids ⁽³⁾	Annual State General Transportation Aids ⁽⁴⁾	Net Annual Increase in Cost
City of Racine	0.0	\$0	\$0	\$0	\$0	\$0
Villages						
Elmwood Park	0.0	\$0	\$0	\$0	\$0	\$0
North Bay	0.0	\$0	\$0	\$0	\$0	\$0
Sturtevant	0.0	\$0	\$0	\$0	\$0	\$0
Wind Point	0.0	\$0	\$0	\$0	\$0	\$0
Towns						
Caledonia	0.0	\$0	\$0	\$0	\$0	\$0
Mount Pleasant	0.0	\$0	\$0	\$0	\$0	\$0
Raymond	6.01	\$142,800	\$65,500	\$17,500	\$51,200	\$139,600
Yorkville	0.49	\$11,600	\$5,300	\$1,400	\$4,200	\$11,300
Total Miles Transferred from						
Local Units of Government:	6.50	\$154,400	\$70,800	\$18,900	\$55,400	\$150,900

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon average costs for preservation, improvement and expansion used in the Regional Transportation Plan for Southeastern Wisconsin (Appendix 2).

³⁾ Estimate based on 1999 levels of funding for the Federal Surface Transportation Program and the State Local Road Improvement Program (Appendix 3).

⁴⁾ Based upon a state reimbursement rate of 26.83% for Racine County (Appendix 4).

APPENDIX 8
ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF TRANSFERRING JURISDICTION
OVER EASTERN RACINE COUNTY ARTERIAL HIGHWAYS TO LOCAL UNITS OF
GOVERNMENT

			Annual State	
			General	Net Annual
		Annual O&M	Transportation	Reduction in
Unit of Government Transferred To:	Miles	Cost (1)	Aids (2)	Cost (3)
City of Racine	0.0	\$0	\$0	\$0
Villages				
Elmwood Park	0.0	\$0	\$0	\$0
North Bay	0.0	\$0	\$0	\$0
Sturtevant	0.0	\$0	\$0	\$0
Wind Point	0.0	\$0	\$0	\$0
Towns				
Caledonia	-2.91	\$69,100	\$18,500	(\$50,600)
Mount Pleasant	-1.46	\$34,700	\$9,300	(\$25,400)
Raymond	0.0	\$0	\$0	\$0
Yorkville	0.0	\$0	\$0	\$0
Total Miles Transferred				
to Local Units of Government:	-4.37	\$103,800	\$27,800	(\$76,000)

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon a state reimbursement rate of 26.83% for Racine County (Appendix 3).

³⁾ No reduction in annual capital cost is considered because it was assumed that any recommended improvements would be made by the County prior to transfer of the segment to the local unit of government.

APPENDIX 9
ESTIMATED FISCAL IMPACT ON RACINE COUNTY OF TRANSFERRING NONARTERIAL
HIGHWAYS TO LOCAL UNITS OF GOVERNMENT IN EASTERN RACINE COUNTY

			State General	Net Annual
		Annual O&M	Transportation	Reduction in
Unit of Government Transferred To:	Miles	Cost (1)	Aids (2)	Cost (3)
City of Racine	0	\$0	\$0	\$0
Villages				
Elmwood Park	0	\$0	\$0	\$0
North Bay	0	\$0	\$0	\$0
Sturtevant	0	\$0	\$0	\$0
Wind Point	0	\$0	\$0	\$0
Towns				
Caledonia	-5.02	\$29,800	\$8,000	(\$21,800)
Mount Pleasant	-2.49		\$4,000	(\$10,800)
Raymond	-7.15		\$11,400	(\$31,100)
Yorkville	0.00	\$0	\$0	\$0
Total Miles Transferred from County				
Total Miles Transferred from County	11.66	¢07.400	ድ ጋጋ 400	(¢c2 700)
to Local Units of Government:	-14.66	\$87,100	\$23,400	(\$63,700)

¹⁾ Based upon average operation and maintenance costs derived from Wisconsin DOT historic expenditure data over a six year period from 1992 to 1997 (Appendix 1).

²⁾ Based upon a state reimbursement rate of 26.83% for Racine County (Appendix 3).

³⁾ No reduction in annual capital cost is considered because it was assumed that any recommended improvements would be made by the County prior to transfer of the segment to the local unit of government.

Town of Caledonia Local Roads Inventory Listing Worksheet--Segments Recommended for Transfer

0	N	LGTH IN MILES	ROAD NAME	FROM	то	L C A U N R E B	MEDIAN W I T D Y T P		S JURISI	DICTION		OSS TION	I M P	UNIT O&	M COST	EXIST. CAP	ITAL COST	PLAN. CAP	ITAL COST	EXIS LOCAL		EXIS COUNT	-	PLAN LOCAL		PLAN COUNT		ST
Υ	NO.					S	H E	Т :	S EXIST.	PLAN.	EXIST.	PLAN.	R	LOCAL	COUNTY	/ MILE	/ MILE	/ MILE	/ MILE	O & M	CAPITAL	MILES						
51	4	1.00	стн v	CO LN	34-1	2 0	0	4 3	30 CTH	LA	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$23,761	\$10,900	\$18,631	\$10,900	\$0	\$0	0
51	4	1.47	стн v	34-1	44-1 CTH G	2 0	0	4 4	40 CTH	LNA	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$8,732	\$16,023	\$6,847	\$16,023	\$0	\$0	0
51	4	2.77	стн v	44-1 CTH G	64-2 CTH K	2 0	0	4 4	40 CTH	LNA	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$16,455	\$30,193	\$12,902	\$30,193	\$0	\$0	0
51	4	0.78	стн v	64-2 CTH K	TN LN	2 0	0	4 4	40 CTH	LNA	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$4,633	\$8,502	\$3,633	\$8,502	\$0	\$0	0
51	4	0.94	SEVEN MILE ROAD	FRONTAGE ROAD	1-1 CTH V	2 0	0	5 3	30 LTH	СТН	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$17,513	\$10,246	\$0	\$0	\$0	\$0	\$22,336	\$10,246	0
51	4	1.00	SEVEN MILE ROAD	1-1 CTH V	STH 38	2 0	0	5 3	30 LTH	СТН	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$18,631	\$10,900	\$0	\$0	\$0	\$0	\$23,761	\$10,900	0
51	4	1.02	SEVEN MILE ROAD	STH 38	6-12	2 0	0	5 7	70 LA	СТН	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$19,004	\$11,118	\$0	\$0	\$0	\$0	\$24,237	\$11,118	0
51	4	2.81	SEVEN MILE ROAD	6-12	STH 32	2 0	0	5 3	30 LTH	СТН	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$52,354	\$30,629	\$0	\$0	\$0	\$0	\$66,769	\$30,629	0
51	4	0.93	FOUR MILE ROAD	STH 31	22-1	2 0	0	5 6	62 LA	СТН	R2	U2U	Р	\$4,658	\$5,940	\$24,450	\$0	\$24,450	\$0	\$17,327	\$22,739	\$0	\$0	\$0	\$0	\$22,098	\$22,739	0
51	4	0.50	FOUR MILE ROAD	22-1	STH 32	2 0	0	5 6	62 LA	СТН	R2	U2U	Р	\$4,658	\$5,940	\$24,450	\$0	\$24,450	\$0	\$9,316	\$12,225	\$0	\$0	\$0	\$0	\$11,881	\$12,225	0
51	4	1.41	стн б	STH 32	52-2	2 0	0	4 7	70 CTH	LA	R2	U2U	Р	\$4,658	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$33,503	\$34,475	\$26,270	\$34,475	\$0	\$0	0
51	4	0.50	СТН G	52-1	MID PT	2 0	0	4 7	70 CTH	LA	R2	U2U	Р	\$4,658	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$11,881	\$12,225	\$9,316	\$12,225	\$0	\$0	0
51	4	0.25	3 MILE RD	MID PT	CITY LTS	2 0	0	5 7	70 LA	СТН	R2	U4U	1	\$4,658	\$5,940	\$100,000	\$0	\$100,000	\$0	\$4,658	\$25,000	\$0	\$0	\$0	\$0	\$5,940	\$25,000	0
51	4	0.08	3 MILE RD	59-7 MID PT	CTH G	2 0	0	5 7	70 LA	СТН	R2	U4U	ı	\$4,658	\$5,940	\$100,000	\$0	\$100,000	\$0	\$1,491	\$8,000	\$0	\$0	\$0	\$0	\$1,901	\$8,000	0
51	4	0.29	стн к	I-94	55-1	2 0	0	4	10 CTH	STH	R2	R4	1	\$4,658	\$5,940	\$0	\$90,000	\$0	\$90,000	\$0	\$0	\$6,891	\$26,100	\$0	\$0	\$0	\$0	0.29
51	4	0.98	стн к	55-1	1-3 CTH V	2 0	0	4	10 CTH	STH	R2	R4	ı	\$4,658	\$5,940	\$0	\$90,000	\$0	\$90,000	\$0	\$0	\$23,286	\$88,200	\$0	\$0	\$0	\$0	0.98
51	4	1.16	стн к	1-3 CTH V	2-2	2 0	0	4	10 CTH	STH	R2	R4	1	\$4,658	\$5,940	\$0	\$90,000	\$0	\$90,000	\$0	\$0	\$27,563	\$104,400	\$0	\$0	\$0	\$0	1.16
51	4	0.37	стн к	2-2	64-32	2 3	0	4	10 CTH	STH	U2U	U2U	Р	\$4,658	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$8,792	\$9,047	\$0	\$0	\$0	\$0	0.37
51	4	0.18	стн к	64-31	64-5 TN LN	2 0	0	4	10 CTH	STH	R2	R2	Р	\$4,658	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$4,277	\$1,962	\$0	\$0	\$0	\$0	0.18
51	4	0.06	стн к	MID PT	СТН Н	2 0	0	4	10 CTH	STH	R2	R4	ı	\$4,658	\$5,940	\$0	\$90,000	\$0	\$90,000	\$0	\$0	\$1,426	\$5,400	\$0	\$0	\$0	\$0	0.06
51	4	0.33	стн к	64-6 MID PT	64-8 TN LN	2 0	0	4	10 CTH	STH	R2	U4U	1	\$4,658	\$5,940	\$100,000	\$0	\$100,000	\$0	\$0	\$0	\$7,841	\$33,000	\$0	\$0	\$0	\$0	0.33
51	4	0.63	стн к	64-7 TN LN	RRX - UAB	2 0	0	4	10 CTH	STH	R2	U4D	ı	\$4,658	\$5,940	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$14,970	\$75,600	\$0	\$0	\$0	\$0	0.63
51	4	0.73	стн к	RRX - UAB	STH 38	2 0	0	4 6	60 CTH	STH	R2	U4D	1	\$4,658	\$5,940	\$120,000	\$0	\$120,000	\$0	\$0	\$0	\$17,346	\$87,600	\$0	\$0	\$0	\$0	0.73
51	4	1.50	FIVE MILE ROAD	MIDDLE ROAD	ERIE ST	2 0	0	5 7	70	LA		R2	N	\$4,658	\$5,940	\$0	\$0	\$0	\$70,000	\$0	\$0	\$0	\$0	\$27,947	\$105,000	\$0	\$0	0
тот	AL	21.69	_																	\$140,294	\$130,857	\$211,357	\$543,626	\$105,547	\$217,318	\$178,923	\$130,857	4.73

COUNTY TO		COUNTY TO) LOCAL NOI		COUNTY					RTERIAL TO		OOUNE:	L			L TO COUN		LOCAL AF	RTERIAL 1	TO STATE		NON-ART		NEW L	OCAL FAC	CILITIES
O&M	CAPITAL	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	CAPITAL	COUNTY O&M	CAPITAL	MILES		CAPITAL	COUNTY O&M	COUNTY	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL
\$0	\$0	0	\$0	\$0	1	\$18,631	\$23,761	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	1.47	\$6,847	\$8,732	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	2.77	\$12,902	\$16,455	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0.78	\$3,633	\$4,633	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.94	\$17,513	\$10,246	\$22,336	\$10,246	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	1	\$18,631	\$10,900	\$23,761	\$10,900	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.02	\$19,004	\$11,118	\$24,237	\$11,118	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	2.81	\$52,354	\$30,629	\$66,769	\$30,629	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.93	\$17,327	\$22,739	\$22,098	\$22,739	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.5	\$9,316	\$12,225	\$11,881	\$12,225	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	1.41	\$26,270	\$33,503	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0.5	\$9,316	\$11,881	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.25	\$4,658	\$25,000	\$5,940	\$25,000	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.08	\$1,491	\$8,000	\$1,901	\$8,000	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$6,891	\$26,100	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$23,286	\$88,200	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$27,563	\$104,400	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$8,792	\$9,047	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$4,277	\$1,962	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$1,426	\$5,400	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$7,841	\$33,000	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$14,970	\$75,600	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$17,346	\$87,600	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.5	\$27,947	\$105,000
\$112,391	\$431,309	5.02	\$23,382	\$29,820	2.91	\$54,217	\$69,145	7.53	\$140,294	\$130,857	\$178,923	\$130,857	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.5	\$27,947	\$105,000

Town of Mount Pleasant Local Roads Inventory Listing Worksheet--Segments Recommended for Transfer

((N	Ν	LGTH IN ROAD MILES NAME	FROM	то	L C A U N R E B	I D	T Y	D FC C S A Y T S	JURISI		SEC	OSS TION	M P	UNIT O&		EXIST CAP URBAN / MILE	ITAL COST RURAL / MILE	PLAN. CAPI URBAN / MILE	ITAL COST RURAL / MILE	LOCA	STING L COST	EXIS COUNT	Y COST	PLAN LOCAL O & M		PLAN COUNT	Y COST	ST	COUNTY TO
5		1.37 CTH V	29-05 CTH C	TN LN	3	, ,,		4 4		LNA	R2	R2	D	\$7,396	\$5,940	\$0			\$10,900		\$0	\$8,138	\$14,933	\$10,132			\$0	WILES	COLIVI
					2 (-				\$10,900											U	\$0
5	8	1.12 CTH V	20-1	29-05 CTH C	2 (0 0	0	4 4	CTH	LNA	R2	R2	Р	\$7,396	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$6,653	\$12,208	\$8,283	\$12,208	\$0	\$0	0	\$0
5	8	0.07 CTH K	27-2	MID PT	2 (0	0	4 10	CTH	STH	R2	R2	Р	\$7,396	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$1,663	\$763	\$0	\$0	\$0	\$0	0.07	\$1,663
5	8	0.32 CTH K	6-1 CTH H	MID PT	2 (0 0	0	4 10	СТН	STH	R2	U4U	1	\$7,396	\$5,940	\$100,000	\$0	\$100,000	\$0	\$0	\$0	\$7,604	\$32,000	\$0	\$0	\$0	\$0	0.32	\$7,604
5	8	1.14 CTH X (LATHROP AVE)	STH 31	CITY LTS	2 (0	0	4 70	стн	LA	R2	U2U	Р	\$7,396	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$27,088	\$27,873	\$33,724	\$27,873	\$0	\$0	0	\$0
5	8	0.27 CTH X (LATHROP AVE)	CITY LTS	CITY LTS	2 (0	0	4 70	стн	LA	R2	U2U	Р	\$7,396	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$6,416	\$6,602	\$7,987	\$6,602	\$0	\$0	0	\$0
5	8	0.05 CTH X (LATHROP AVE)	CITY LTS	MID PT	2 (0	0	4 70	стн	LA	R2	U2U	Р	\$7,396	\$5,940	\$24,450	\$0	\$24,450	\$0	\$0	\$0	\$1,188	\$1,223	\$1,479	\$1,223	\$0	\$0	0	\$0
5	8	1.18 90TH STREET	STH 20	стн с	2 4	1 ()	5 70	o	LA		U2U	N	\$7,396	\$5,940	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$34,907	\$141,600	\$0	\$0	0	\$0
5	8	1.15 MEMORIAL DRIVE	CITY LTS SE	TWN LINE	2 3	3 (0	5 70	D	LA		U2U	N	\$7,396	\$5,940	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$34,020	\$138,000	\$0	\$0	0	\$0
5	8	1.5 AIRLINE ROAD	стн с	WASHINGTON AVENUE	2 4		0	5 70	o	LA		U2U	N	\$7,396	\$5,940	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$44,374	\$180,000	\$0	\$0	0	\$0
5	8	1.4 AIRLINE ROAD	CITY LTS SOUTH	BRAUN ROAD	2 4)	5 70)	LA		U2U	N	\$7,396	\$5,940	\$0	\$0	\$120,000	\$0	\$0	\$0	\$0	\$0	\$41,416	\$168,000	\$0	\$0	0	\$0
т	TAL	9.57																		\$0	\$0	\$58,750	\$95,601	\$216,322	\$690,438	\$0	\$0	0.39	\$9,267

ROAD NAME	O RIAL		UNTY TO LO	IAL	COUNTY	TO LOCAL				RTERIAL T						L TO COUNT		LOCAL A	RTERIAL	TO STATE	LOCA	AL NON-ART TO STATE		NEV	V LOCAL FAC	ILITIES
	CAPITAL	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	LOCAL CAPITAL		COUNTY	MILES	LOCAL O&M	LOCAL CAPITAL	COUNTY O&M	COUNTY	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL
стн v	\$0	1.37	\$10,132	\$8,138	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
CTH V	\$0	1.12	\$8,283	\$6,653	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$763	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$32,000	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
CTH X (LATHROP AVE)	\$0	0	\$0	\$0	1.14	\$33,724	\$27,088	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
CTH X (LATHROP AVE)	\$0	0	\$0	\$0	0.27	\$7,987	\$6,416	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
CTH X (LATHROP AVE)	\$0	0	\$0	\$0	0.05	\$1,479	\$1,188	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
90TH STREET	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.18	\$34,907	\$141,600
MEMORIAL DRIVE	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.15	\$34,020	\$138,000
AIRLINE ROAD	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.5	\$44,374	\$180,000
AIRLINE ROAD	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	1.4	\$41,416	\$168,000
	\$32,763	2.49	\$18.415	\$14.791	1.46	\$43,191	\$34.691	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	5.23	\$154.717	\$627,600

Town of Yorkville Local Roads Inventory Listing--Segments Recommended for Transfer

С	N	LGTH	ROAD NAME	L (A I N I	J I	T	RD		JURISDI	ICTION	CR(SEC		I L	JNIT O&	M COST	EXIST CAP	ITAL COST	PLAN. CAP URBAN	ITAL COST		STING L COST	EXIS COUNT	STING TY COST		NNED L COST	PLAN COUNT			OUNTY TO	
Ý	NO.			S	Н	Ē	Ť	SI	EXIST.	PLAN.	EXIST.	PLAN.	R I	LOCAL	COUNTY	/ MILE	/ MILE	/ MILE		O & M	CAPITAL	O & M	CAPITAL	O & M	CAPITAL	O & M	CAPITAL	MILES	O&M	CAPITAL
5	1 18	0.49	FIRST ST (COUNTY LINE RO	AD) 2	0	0	5	45	LNA	CTH	R2	R2	Р	\$1,518	\$5,940	\$0	\$10,900	\$0	\$10,900	\$2,976	\$5,341	\$0	\$0	\$0	\$0	\$11,643	\$5,341	0	\$0	i

ROAD NAME	LOC	COUNTY T CAL NON-AR LOCAL		COUNTY		ARTERIAL COUNTY			ARTERIAL 1	TO COUNTY	COUNTY				L TO COUN			RTERIAL	TO STATE		L NON-AR TO STATI		NEW LO	DCAL FAC	CILITIES
	MILES	O&M COST	O&M COST	MILES	O&M	O&M	MILES	O&M	CAPITAL	O&M	CAPITAL	MILES	O&M	CAPITAL	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL
FIRST ST (COUNTY LINE ROAD)	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0.49	\$2,976	\$5,341	\$11,643	\$5,341	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0

Town of Raymond Local Roads Inventory Listing Worksheet--Segments Recommended for Transfer

0	N	LGTH IN MILES	ROAD NAME	FROM	то	L C A U N R		T R	DFC CS	JURISD	DICTION	CR(SEC	OSS TION	- M	UNIT O8	M COST			PLAN CAP			TING COST		STING Y COST	PLAN LOCAL			NNED TY COST		COUNTY TO ATE ARTER		LOCA
YN	Ю.					S	Н	E '	A Y T S	EXIST.	PLAN.	EXIST.	PLAN.	R	LOCAL	COUNTY	URBAN / MILE	RURAL / MILE	URBAN / MILE	RURAL / MILE	O & M	CAPITAL	O & M	CAPITAL	O & M	CAPITAL	O & M	CAPITAL	MILES	O&M	CAPITAL	MILES
51	12	0.96	SEVEN MILE ROAD	US 45	1-1	2 0	0		5 45	LNA	СТН	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$21,236	\$10,464	\$0	\$0	\$0	\$0	\$22,811	\$10,464	0	\$0	\$0	0
51	12	2.18	SEVEN MILE ROAD	1-1	8-1 CTH G	2 0	0		5 45	LNA	СТН	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$48,223	\$23,762	\$0	\$0	\$0	\$0	\$51,800	\$23,762	0	\$0	\$0	0
51	12	2.87	SEVEN MILE ROAD	8-1 CTH U	I-94	2 0	0		5 45	LNA	СТН	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$63,487	\$31,283	\$0	\$0	\$0	\$0	\$68,195	\$31,283	0	\$0	\$0	0
51	12	2.99	CTH G	US 45	СТН И	2 0	0		4 30	СТН	LNA	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$17,762	\$32,591	\$16,535	\$32,591	\$0	\$0	0	\$0	\$0	2.99
51	12	2.44	CTH G	стн и	16-1	2 0	0		4 30	СТН	LNA	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$14,494	\$26,596	\$13,494	\$26,596	\$0	\$0	0	\$0	\$0	2.44
51	12	1	СТН G	16-1	I-94	2 0	0		4 30	СТН	LNA	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$5,940	\$10,900	\$5,530	\$10,900	\$0	\$0	0	\$0	\$0	1
51	12	0.72	стн к	US 45	2-1 108TH ST	2 0	0		4 10	СТН	LNA	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$4,277	\$7,848	\$3,982	\$7,848	\$0	\$0	0	\$0	\$0	0.72
51	12	2.4	СТН К	2-1 108TH ST	7-1 CTH U	2 0	0		4 10	СТН	STH	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$57,027	\$26,160	\$0	\$0	\$0	\$0	2.4	\$57,027	\$26,160	0
51	12	0.23	стн к	7-1 CTH U	8-2 CTH U	2 0	0		4 10	СТН	STH	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$5,465	\$2,507	\$0	\$0	\$0	\$0	0.23	\$5,465	\$2,507	0
51	12	3.19	СТН К	8-2 CTH U	I-94	2 0	0		4 10	CTH	STH	R2	R2	Р	\$5,530	\$5,940	\$0	\$10,900	\$0	\$10,900	\$0	\$0	\$75,799	\$34,771	\$0	\$0	\$0	\$0	3.19	\$75,799	\$34,771	0
тот	AL	18.98																											5.82	\$138,291	\$63,438	7.15

ROAD NAME	COUNTY TO LL NON-ART LOCAL		COUNTY	TO LOCAL	ARTERIAL		LOCAL AF			Y COUNTY		LOCAL NON	N-ARTERIAL	TO COUNTY	TY	LOCAL	ARTERIAL	TO STATE		_ NON-ART		NEW L	OCAL FAC	CILITIES
	O&M	O&M	MILES	O&M	O&M	MILES	O&M	CAPITAL	O&M	CAPITAL	MILES	O&M	CAPITAL	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL
SEVEN MILE ROAD	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0.96	\$21,236	\$10,464	\$22,811	\$10,464	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SEVEN MILE ROAD	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	2.18	\$48,223	\$23,762	\$51,800	\$23,762	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SEVEN MILE ROAD	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	2.87	\$63,487	\$31,283	\$68,195	\$31,283	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
СТН G	\$16,535	\$17,762	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
СТН G	\$13,494	\$14,494	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
СТН G	\$5,530	\$5,940	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$3,982	\$4,277	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
стн к	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
	\$39,541	\$42,473	0	\$0	\$0	0	\$0	\$0	\$0	\$0	6.01	\$132,946	\$65,509	\$142,805	\$65,509	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0

City of Racine Local Roads Inventory Listing Worksheet--Segments Recommended for Transfer

C O U N T		LGTH IN MILES	ROAD NAME	FROM	то	L C A L N R E B	D B T	T Y C P A	ΑY		DICTION	SEC	OSS TION	I M P			EXIST CAPI	RURAL	URBAN	RURAL	LOCA	STING L COST	COUN	STING TY COST	PLAN LOCAL	COST	PLAN COUNT	Y COST	STAT	DUNTY TO
Y		0.40	MAIN OT N OTH O	00010 07	MALTON AVE	4 0		E 1	5 70			U4U	U4U	R		COUNTY	/ MILE	/ MILE	/ MILE	/ MILE \$0		\$2,934		CAPITAL	O & M	\$0		CAPITAL	MILES	O&M \$0
51			MAIN ST N-CTH G MAIN ST N-CTH G		MELVIN AVE	2 3			5 70	LA LA	СТН	U2U	U2U	P	\$12,726 \$12,726	\$5,940 \$5,940	\$24,450 \$24,450	\$0 \$0	\$24,450 \$24,450	\$0	\$6,108 \$21,379	\$2,934	\$0 \$0			\$0	\$2,851 \$9,980	\$2,934 \$10,269	0	\$0
51			MAIN ST N-CTH G		LOMBARD AVE	2 3			5 70	LA	СТН	U2U	U2U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$7,126	\$3,423	\$0		\$0	\$0	\$3,327	\$3,423	0	\$0
51			MAIN ST N-CTH G		CPL AT NORTH ST	2 3			5 70		СТН	U2U	U2U		\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$18,325	\$8,802				\$0	\$8,554	\$8,802	0	\$0
51				SHIRLEY AVE	N CITY LTS	4 3			5 70	LA	СТН	U4D	U4D	P	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$1,527	\$769			\$0	\$0	\$713	\$769	0	\$0
51				DURAND AVE	OLIVE ST	4 3			5 62		СТН	U4D	U4D	P	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$19,852	\$9,994	\$0			\$0	\$9,267	\$9,994	0	\$0
51				OLIVE ST	21ST ST	4 3			5 62	LA	СТН	U4D	U4D	D	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$5,599	\$2,819	\$0		\$0	\$0	\$2,614	\$2,819	0	\$0
51				21ST ST	REPUBLIC AVE	4 3			5 62		СТН	U4D	U4D	Р	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$12,726	\$6,406	\$0			\$0	\$5,940	\$6,406	0	\$0
51				REPUBLIC AVE	16TH ST	4 3			5 62		СТН	U4D	U4D	Р	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$15,780	\$7,944	\$0		\$0	\$0	\$7,366	\$7,944	0	\$0
51				16TH ST	WRIGHT AVE	4 3		11 5			СТН	U4D	U4D	P	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$9,672					\$0	\$4,515	\$4,869	0	\$0
51				WRIGHT AVE	WASHINGTON AVE	4 3		11 5			СТН	U4D	U4D	Р	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$12,217	\$6,150			\$0	\$0	\$5,703	\$6,150	0	\$0
51				WASHINGTON AVE	KINZIE AVE	4 3			5 70		СТН	U4D	U4D	Р	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$14,253	\$7,175				\$0	\$6,653	\$7,175	0	\$0
51				KINZIE AVE	GRACELAND BLVD	4 3			5 70	LA	СТН	U4D	U4D	D	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$11,708		\$0		\$0	\$0	\$5,465	\$5,894	0	\$0
51				GRACELAND BLVD	WESTWAY AVE	4 3			5 70		СТН	U4D	U4D	P	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$11,700		\$0			\$0	\$5,227	\$5,638	0	\$0
51				WESTWAY AVE	SHIRLEY AVE	4 3			5 70		СТН	U4D	U4D	P	\$12,726	\$5,940	\$25,625	\$0	\$25,625	\$0	\$17,307	\$8,713	\$0			\$0	\$8,079	\$8,713	0	\$0
51				WICKHAM	STATE	4 3			5 70		СТН	U4U	U4U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$15,780	\$7,580	\$0			\$0	\$7,366	\$7,580	0	\$0
51				WICKHAM	ISLAND AVE	2 1			5 70	LA	СТН	U2U	U2U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$3.054	\$1,467	\$0		\$0	\$0	\$1,426	\$1,467	0	\$0
51				ISLAND AVE	CHICAGO ST	2 0			5 70		СТН	R2	U2U		\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$3,054		\$0			\$0	\$1,426	\$1,467	0	\$0
51				CHICAGO ST	MERTINS AVE	2 0			5 70	LA	СТН	R2	U2U	Р	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$2,036	\$978	\$0		\$0	\$0	\$950	\$978	0	\$0
51				MERTINS AVE	W OF EISENHOWER DR	2 0			5 70		СТН	R2	U2U	Р	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$14,253	\$6,846	\$0			\$0	\$6,653	\$6,846	0	\$0
51			THREE MILE RD	DOUGLAS AVE	MID POINT EAST	2 0			5 70	LA	СТН	R2	U4U		\$12,726	\$5,940	\$100,000	\$0	\$100,000	\$0	\$12,217	\$24,000	\$0		\$0	\$0	\$5,703	\$24,000	0	\$0
51				CPLN WOF LASALLE ST	CPLN EOF ERIE ST	2 3			5 70		СТН	U2U	U4U		\$12,726	\$5,940	\$100,000	\$0	\$100,000	\$0	\$20,870	\$41,000	\$0			\$0	\$9,742	\$41,000	0	\$0
51				CPLN EOF ERIE ST	MID PT EOF RUBY ST	2 0			5 70		СТН	R2	U4U		\$12,726	\$5,940	\$100,000	\$0	\$100,000	\$0	\$4,581	\$9,000	\$0		\$0	\$0	\$2,139	\$9,000	0	\$0
51				N MAIN ST	ERIE ST	2 3			5 90		STH	U2U	U2U	D	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0						\$0	\$0	\$0,000	0	\$0
51				ERIE ST	DOUGLAS AVE	2 3			5 90		STH	U2U	U2U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$26,979	\$12,959				\$0	\$0	\$0	0	\$0
51				DOUGLAS AVE	NORTH MEMORIAL DR	2 3			5 70		STH	U2U	U2U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$7,126					\$0	\$0	\$0	0	\$0
51				N MEMORIAL DR	RAPIDS DR	2 3			5 70	LA	STH	U2U	U2U	P	\$12,726	\$5,940	\$24,450	\$0	\$24,450	\$0	\$7,126	\$3,423	\$0			\$0	\$0	\$0	0	\$0
51				RAPIDS DR	GEORGIA AVE	2 3			5 80		STH	U2U		P	\$12,726		\$24,450	\$0	\$24,450	\$0	\$31,560	\$15,159				\$0	\$0	\$0	0	\$0
				RAPIDS DR	CTH MM	4 1				LIM		020	U2U U4D	N		\$5,940				\$0	\$31,560						\$0		0	\$0
51				CITY LTS N	CTY LTS S	2 4			5 70		LA LA		U2U	N	\$12,726 \$12,726	\$5,940	\$0 \$0	\$0 \$0	\$135,000	\$0	\$0	\$0 \$0	\$0 \$0		\$15,271 \$27,997	\$40,500	\$0	\$0 \$0	0	\$0
			21ST STREET	LONI LANE	AIRLINE ROAD EXT.	4 3			5 70		LA				\$12,726	\$5,940 \$5,940	\$0 \$0	\$0	\$120,000	\$0	\$0	\$0	\$0		\$48,358	\$66,000	\$0	\$0 \$0	0	
51 TOT		8.47	ZIOI DIREEI	LONI LAINE	AIRLINE KUAD EXT.	4 3	U	+	5 70		LA		U4U	IN	φ1∠,/26	\$5,940	\$0	\$0	\$120,000	\$0	**	\$222,032	\$0		, ,,,,,,,	\$114,000	**		0	\$0 \$0
101	ΛL	0.47																			\$303,322	φεεε,υ32	φυ	\$ U	φ51,020	ΨΖΖυ,Ουυ	000,1∠1 w	ψ104,134	U	φυ

ROAD NAME	O RIAL		COUNTY T	TERIAL	COUNTY	TO LOCAL				RTERIAL TO			L			L TO COU			CAL ARTE			L NON-AR'		NEW L	OCAL FA	CILITIES
	CAPITAL	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	COUNTY O&M	MILES	LOCAL O&M	LOCAL CAPITAL	COUNTY O&M	COUNTY CAPITAL	MILES	O&M	CAPITAL	COUNTY O&M	COUNTY	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL	MILES	O&M	CAPITAL
MAIN ST N-CTH G	\$0	0	\$0	\$0	0	\$0	\$0	0.12	\$6,108	\$2,934	\$2,851	\$2,934	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
MAIN ST N-CTH G	\$0	0	\$0	\$0	0	\$0	\$0	0.42	\$21,379	\$10,269	\$9,980	\$10,269	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
MAIN ST N-CTH G	\$0	0	\$0	\$0	0	\$0	\$0	0.14	\$7,126	\$3,423	\$3,327	\$3,423	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
MAIN ST N-CTH G	\$0	0	\$0	\$0	0	\$0	\$0	0.36	\$18,325	\$8,802	\$8,554	\$8,802	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST N	\$0	0	\$0	\$0	0	\$0	\$0	0.03	\$1,527	\$769	\$713	\$769	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.39	\$19,852	\$9,994	\$9,267	\$9,994	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.11	\$5,599	\$2,819	\$2,614	\$2,819	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.25	\$12,726	\$6,406	\$5,940	\$6,406	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.31	\$15,780	\$7,944	\$7,366	\$7,944	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.19	\$9,672	\$4,869	\$4,515	\$4,869	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.24	\$12,217	\$6,150	\$5,703	\$6,150	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.28	\$14,253	\$7,175	\$6,653	\$7,175	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.23	\$11,708	\$5,894	\$5,465	\$5,894	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.22	\$11,199	\$5,638	\$5,227	\$5,638	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
OHIO ST	\$0	0	\$0	\$0	0	\$0	\$0	0.34	\$17,307	\$8,713	\$8,079	\$8,713	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SPRING ST	\$0	0	\$0	\$0	0	\$0	\$0	0.31	\$15,780	\$7,580	\$7,366	\$7,580	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SPRING ST	\$0	0	\$0	\$0	0	\$0	\$0	0.06	\$3,054	\$1,467	\$1,426	\$1,467	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SPRING ST	\$0	0	\$0	\$0	0	\$0	\$0	0.06	\$3,054	\$1,467	\$1,426	\$1,467	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SPRING ST	\$0	0	\$0	\$0	0	\$0	\$0	0.04	\$2,036	\$978	\$950	\$978	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
SPRING ST	\$0	0	\$0	\$0	0	\$0	\$0	0.28	\$14,253	\$6,846	\$6,653	\$6,846	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
THREE MILE RD	\$0	0	\$0	\$0	0	\$0	\$0	0.24	\$12,217	\$24,000	\$5,703	\$24,000	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
THREE MILE RD	\$0	0	\$0	\$0	0	\$0	\$0	0.41	\$20,870	\$41,000	\$9,742	\$41,000	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
THREE MILE RD	\$0	0	\$0	\$0	0	\$0	\$0	0.09	\$4,581	\$9,000	\$2,139	\$9,000	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0
YOUT ST	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0.11	\$5,599	\$2,690	0	\$0	\$0
YOUT ST	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0.53	\$26,979	\$12,959	0	\$0	\$0
YOUT ST	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0.14	\$7,126	\$3,423	0	\$0	\$0	0	\$0	\$0
YOUT ST	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0.15	\$7,635	\$3,668	0	\$0	\$0	0	\$0	\$0
YOUT ST	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0.62	\$31,560	\$15,159	0	\$0	\$0	0	\$0	\$0
GREEN BAY RD	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.3	\$15,271	\$40,500
AIRLINE ROAD	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0.55	\$27,997	\$66,000
21ST STREET	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	\$0	\$0	0	\$0	\$0				\$0	\$0	0	\$0	\$0			\$114,000
	\$0	0	\$0	\$0	0	\$0	\$0	5.12	\$260,623	\$184,134	\$121,658	\$184,134	0	\$0	\$0	\$0	\$0	0.91	\$46,322	\$22,250	0.64	\$32,578	\$15,648	1.8	\$91,625	\$220,500

APPENDIX 8

AN ANALYSIS OF THE BENEFITS OF CONSOLIDATING DISPATCH SERVICES IN RACINE COUNTY

AN ANALYSIS OF THE BENEFITS OF CONSOLIDATING DISPATCH SERVICES IN RACINE COUNTY

One of the key support functions for any police, fire or rescue department is the dispatch service center that takes calls for emergency service and communicates with the personnel trained to respond. The dispatch center personnel answer incoming 911 calls and calls to local police, fire and rescue departments, and dispatch personnel and equipment as needed. After the service personnel are dispatched, the dispatch center continues to monitor the situation, communicating with the police, fire or rescue personnel at the scene and responding to requests for information or backup. The dispatcher serves as the communication link between the responding units and other units or sources of information, and as such, helps ensure the safety of emergency personnel and the public. In addition to these duties, the dispatcher also keeps a record of each call, including such information as the length of the call, the units dispatched, information requested, a description of the situation, and any other relevant information.

Currently, seven different agencies provide dispatch services in Racine County. Racine County and the municipalities in the County have been considering the possibility of consolidating all dispatch operations and setting up a centralized dispatch center that would handle all 911 calls for the entire county. It is anticipated that such a consolidated operation may offer improved efficiency in the provision of services and an overall improvement in public safety. It is also possible that a consolidation of services may result in cost savings that would ultimately benefit taxpayers in the county.

For these reasons, Racine County passed Resolution 99-46 on June 8, 1999 stating the intent of the County to provide joint dispatch service to all municipalities within Racine County if appropriate agreements could be reached. A copy of that resolution is attached as Appendix 1. The resolution made several recommendations as to the governance of a joint dispatch center and the proposed terms of the agreements. Racine County and the City of Racine hired Ruekert/Mielke in the spring of 2000 to conduct a study to examine the existing dispatch service arrangements in the County and compare them with a potential consolidated operation. Consistent with the county resolution, it was assumed for the purposes of this study that the Racine County Sheriffs Department would manage a centralized county dispatch service. However, this report does not make any recommendations as to the governance, financing, or phasing-in of a joint dispatch service. This report is intended to compare existing total countywide dispatch personnel and operating costs with the projected costs for a consolidated operation and to evaluate the potential advantages or disadvantages that a centralized dispatch center might afford in terms of service efficiency and overall public safety. In addition, this report addresses the issues of the location of a consolidated dispatch center and alternative governance structures for a consolidated operation.

EXISTING DISPATCH SERVICE ARRANGEMENTS

The seven different agencies providing dispatch service in Racine County include the Racine County Sheriff's Department, the City of Racine Police Department, the Town of Mount Pleasant Police Department, the Town of Caledonia Police Department, the City of Burlington Police Department, the Village of Sturtevant Police Department and the Town of Burlington Police Department. With the exception of the Town of Burlington, each of the local dispatch operations provides dispatch for its own local police, fire and rescue units. The City of Racine provides fire and rescue service to the Village of Wind Point and therefore also provides dispatch service for the Village. The Sheriff's Department provides dispatch service for all other municipalities in the county, serves as a backup dispatch center for the departments listed above, and takes all 911 calls placed from cellular phones throughout the county. Racine County municipalities and their associated dispatch provider for police, fire and rescue services are shown in Table 1.

With the exception of the Town of Burlington, all of the municipal dispatch centers operate on a full-time, 24-hour per day basis. The Town of Burlington Police Department operates a dispatch service an average of 60 hours per week, primarily from 8:00 a.m. to 4:00 p.m., Monday through Saturday. The Town of Burlington Police Department dispatches calls for police service that it receives on either its administrative or emergency phone lines. It also handles initial dispatch of fire and rescue calls that come in on the Police Department line, and then contacts the County Sheriff's Department. All 911 calls go directly to the County Sheriff's Department. When there is no dispatcher on duty at the Town, calls on the emergency line are forwarded to the County Sheriff's dispatch center and the administrative line has a recording directing the caller to dial the emergency number or call 911.

Racine County provides dispatch as a service to any police, fire or rescue agency in the County that does not have its own dispatch operations. This service is paid for through the county property tax and is not paid for directly by those municipalities that rely on the service.

EXISTING PERSONNEL COSTS, OPERATING COSTS AND CAPITAL INVESTMENT IN DISPATCH EQUIPMENT

Each entity currently providing dispatch service was asked to provide certain information regarding the personnel and equipment utilized at its dispatch facility. For personnel and operating costs, each entity reported year 2000 budgeted costs. Some entities reported that they do not budget separately for dispatch services. In such cases, the municipality separated dispatch costs out of its budget, using reasonable estimates as necessary.

For personnel information, the agencies were asked to provide budgeted costs (salaries, FICA, benefits, etc), number of personnel, hours worked on dispatch and base hourly wage rates. The personnel information is summarized in Table 2. As shown in the first two columns, a total of 78 workers are employed in dispatch functions. Since some employees work part-time and some devote only half of their working time to dispatch duties, it was necessary to convert the number of employees to full time equivalents. A full-time equivalent employee is a person who spends 40 hours per week on dispatch duties. The total number of full-time equivalent workers assigned to dispatch in the county is 68. Hourly base wage rates for dispatch personnel range from \$9.55 to \$18.67 and average \$15.55. The municipalities in Racine County currently spend approximately \$3 million annually for dispatch personnel costs.

Dispatch service providers were also asked to provide budgeted annual operating costs, including non-personnel costs such as equipment maintenance and service contracts. On an annual basis the dispatch service providers spend a total of approximately \$253,000 per year for operating costs. All of the dispatch providers house their dispatch operations in the same building as other public safety functions and none of them allocate building-related costs, such as heating and electricity, to the dispatch function. Rather than attempt to estimate building costs, the dispatch providers were asked to estimate the amount of square footage allocated to dispatch equipment and personnel. Dispatch services utilize approximately 3,400 square feet of building space countywide. Based upon an average building rental value of \$10 per square foot per year, dispatch service building costs approximate \$34,000 per year. Including estimated building costs, total annual operating costs for dispatch services countywide, excluding personnel costs, are approximately \$287,000 per year. Table 3 summarizes the annual operating costs and estimated building space utilized by dispatch services.

Information on personnel, operating costs and building usage for all dispatch service providers is summarized in Table 4. As shown, under the existing service arrangements, approximately \$3.3 million per year is being spent in the county each year for dispatch services, excluding amortization of capital equipment and investment in new equipment.

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Dispatch service providers were also asked to provide information on existing and anticipated future capital investments in dispatch equipment. The Racine County Sheriff's Department stated that the equipment in use at its dispatch facility is basically obsolete and that a major capital investment is required in order to provide adequate service in the future. The county is looking to replace its four-position dispatch station with a new five-position console for approximately \$900,000. The county will also need to spend \$500,000 for 911 upgrade and telephone consoles. Replacement is required for primary radio equipment that is located throughout the county at a cost of approximately \$340,000. Finally, the County is anticipating a major investment in radio equipment infrastructure of \$2.25 million for a new microwave system. The total investment in capital equipment required by the county is estimated at \$3.99 million.

The Town of Mt. Pleasant and the Town of Caledonia also stated that their dispatch equipment is basically obsolete and each would require a major capital investment in new equipment of approximately \$500,000 in order to continue providing quality dispatch service. The Town of Burlington, which provides limited dispatch services, has approximately \$100,000 invested in dispatch equipment and anticipates an additional investment of \$40,000 in the near future. The City of Racine estimates that its current investment in dispatch service equipment is approximately \$703,000. Most of this equipment was installed in 1990 or 1991 and is now nearly fully depreciated. The City can continue to operate its existing equipment under the current configuration of dispatch consoles. However, if it decides to add another console, the existing equipment would have to be upgraded in order to be compatible with the new equipment. Without considering the possibility of a consolidated dispatch operation, the City does not anticipate any spending on new dispatch equipment in the near future.

The City of Burlington has dispatch equipment that was installed in 1983 when the police department building was constructed. Most of this equipment is obsolete and the department is planning to replace much of it within the next five years. The cost to replace the equipment is estimated at \$125,000. However, the Police Chief stated that approximately half of that cost would be needed to replace equipment that would be used by the department regardless of whether or not it provides dispatch service. For example, the department would still need radio and phones to communicate with its personnel, a building security system, a video-audio monitoring system for its lockup facility, and an intercom system. The department's dispatch personnel currently monitor all of these systems. Therefore, only \$62,500 can be considered as future investment in dispatch equipment. The Village of Sturtevant has approximately \$41,000 invested in its existing dispatch equipment and anticipates an additional investment of \$10,000 to upgrade its in-house computer network.

Existing and anticipated capital investment in dispatch equipment is summarized in Table 5. Under the existing dispatch service arrangements in the county, the entities providing service anticipate required future investments of approximately \$5.1 million in new dispatch equipment.

DISPATCH SERVICE CALL VOLUMES

Dispatch calls are probably the best single indicator of the level of activity at a dispatch service center. Detailed data on dispatch calls for the past year was requested from each of the dispatch service providers. It should be noted that call data is not exactly equivalent from one dispatch agency to the next due to differences in reporting. Racine County and the City of Racine now use the Law Enforcement Automation Project (LEAP), a joint computer system intended to standardize the record keeping and dispatching functions of law enforcement agencies. However, other agencies are not yet using this system and may have different methods for tallying the number of dispatch calls received. In general, the number of calls includes 911 calls, direct calls to local police, fire or rescue lines for which one or more units were dispatched, and communication from units in the field to report an incident or request information or backup.

Multiple communications about a single incident are reported as one call. The Town of Burlington Police Department only records the number of service requests or complaints for which a complaint number was assigned and a written report was drafted. The Town did track the number of phone calls and radio communications for a one-week period for purposes of this study. However, this tally counted every call separately, including non-emergency calls and all follow-up communications for each incident, and so was not comparable to the data collected from other agencies. For purposes of this study, the number of calls for the Town of Burlington was estimated based on the number of calls per capita for other municipalities.

For those providers with only partial year data it was assumed that the time period for which data was available is representative of the annual average. From the available data, an average number of dispatch calls was developed for each hour of the week. This was done by taking the total number of calls for the given day and hour and dividing by the number of days in the sample period. For example, the total number of calls during the first hour, from 12 a.m. to 1 a.m., for all the Fridays in the year was divided by the number of Fridays in the year to obtain the average number of calls received during the first hour on a typical Friday. This same calculation was performed for each hour and day of the week.

Data on the average number of calls received do not indicate the length of time spent on each call, which may vary considerably from one call to another. The most accurate measure of the personnel time required to handle a certain volume of calls during a given time period would be the number of calls multiplied by the amount of time spent on each call. However, since calls of all lengths are distributed randomly throughout all time slots during the year, the amount of time spent on a certain number of calls during a particular shift is likely to approximate the average. Therefore, the average number of calls is a reasonable indicator of the workload during a particular shift.

Average call data were summed for all dispatch providers other than Racine County. This was done to show the number of incremental calls that the County dispatch center would receive if a consolidated operation were put in place. As shown in Table 6, the County currently handles an average of 160 calls per day, while the combined total for all other providers averages 410 calls per day. Therefore, the total average number of dispatch calls per day in the entire county is 570. Dispatch activity varies by day of the week, with the lowest average number of calls per day of 510 coming on Sunday and the highest daily average of 619 coming on Friday. On average, a combined operation would have approximately 356% of the current activity of the county dispatch operation. This estimate may be slightly higher than the actual number of incidents due to the fact that the County handles 911 calls placed from cellular phones. Sometimes the local police department receives a call about an incident and the County also receives a call about the same incident from someone driving by who places a call from their cellular phone. Thus, both the local police department and the County count one incident as two separate dispatch calls.

A more detailed way to analyze the amount of activity is to look at call volume patterns throughout the day for each day of the week. This information would be useful in planning for dispatch staffing. The average number of calls per hour was charted on a bar graph for each day of the week, shown as Figures 1 – 7. Figure 8 depicts the number of calls per hour over the entire week. These figures illustrate several characteristics of the volume of dispatch calls. First, the calls received per hour follow a relatively similar pattern for all days of the week. The volume of calls tends to be lowest from around 5:00 a.m. to about 7:00 a.m. and tends to peak from about 4:00 p.m. to about 6:00 p.m. This pattern holds true for the weekends as well, with a few variations. On Friday evenings, the number of calls decreases somewhat after 6:00 p.m. but remains at a relatively high level through Saturday at 2:00 a.m. The higher volume of calls on Saturday evenings begins around 4:00 p.m. and continues at the same level until 2:00 a.m. on Sunday rather than declining after 6:00 p.m. In general the volume of calls received on Sundays and Mondays is slightly lower than the activity level during the rest of the week. The total

volume of calls received on Saturdays is similar to the activity levels on Tuesday through Friday, but calls are distributed more evenly throughout the day so the peak volume of calls received in a single hour is not as high.

These figures illustrate another feature relevant to planning for consolidated dispatch service. The lower portion of each bar shows the volume of calls currently handled by the Racine County Sheriff's Department, while the upper portion represents the volume of calls handled by all other dispatch operations in the County. As demonstrated by the charts, the volume of calls throughout the rest of the County follows a pattern very similar to that of the calls currently handled by the Sheriff's Department. Therefore, it can be expected that the pattern of calls for a consolidated center will not vary significantly from that of the current County Dispatch Center. It was stated earlier that the consolidated dispatch would receive an average of 356% of the overall volume of calls currently handled by the County. Due to the similarity of the patterns in activity levels, the volume of calls to the consolidated center during any given shift or hour of the day would also be approximately 356% of the current volume of calls handled by the County for that shift or hour of the day.

PROPOSED PERSONNEL COSTS, OPERATING COSTS AND CAPITAL INVESTMENT REQUIRED FOR A CONSOLIDATED OPERATION

The Racine County Sheriff's Department personnel and the City of Racine Police Department personnel were interviewed regarding the proposed setup of a consolidated dispatch operation. Dispatch equipment vendors were also interviewed regarding equipment needs and costs for the operation. Estimates were developed for personnel costs, operating costs and capital investment required to equip and operate a consolidated, countywide dispatch facility.

In order to project personnel costs, it was first necessary to determine the number of employees required to handle the volume of calls that would come into a consolidated dispatch center. The total annual volume of dispatch calls in the county is currently 211,216. Based upon call volumes handled at existing local and regional dispatch centers, it was assumed that dispatchers at the new center would handle 3,800 calls per year on average, or an average of two calls per working hour. This would require a total of 56 dispatchers to handle the total number of calls (Table 7a). Considering three work shifts per day, seven days a week, and accounting for employees being off duty for scheduled days off, holidays, vacation and sick time, a net total of eleven dispatchers would be on duty per shift. In addition, the Sheriff's department stated that two supervisors would be required. Therefore the total number of employees was estimated at 58. This total would be 10 persons less than the number of full-time equivalent employees currently working dispatch countywide. This represents a decrease of approximately 15% in the total number of dispatch employees countywide. This is likely to be a conservatively high estimate given the staffing level of similarly sized counties that provide consolidated dispatch service (Table 7c).

This estimate is based upon the assumption that the number of calls per year would remain constant and that no significant increase in the number of calls handled per dispatcher would occur. It is possible however that the consolidated center and new technology would result in increased efficiencies in terms of personnel utilization that can not be quantified at this time.

The total annual personnel costs were estimated at \$2,830,665 (Table 7b). Even though the total number of dispatch personnel would decrease, the total personnel cost would not change proportionately since compensation for employees at the consolidated center would be based upon the Sheriff's Department pay scale, which is higher than the countywide average. Annual operating costs for the consolidated center were estimated at \$153,000. This figure includes the cost of maintaining the 900 square feet of space at the Racine County Law Enforcement Center that is currently used as the dispatch center for the Racine County Sheriff's Department.

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Because the equipment at the backup site would not normally be used, it would not require a maintenance contract or any other operating costs to maintain this center. Total personnel and operating costs were estimated at approximately \$3.0 million per year. It was estimated that annual personnel and operating costs for a consolidated operation would be approximately \$349,000 less than the current total amount spent on dispatch service in the county.

It is anticipated that the consolidated operation would be located at the site of the existing City of Racine dispatch service operation. The new operation would utilize approximately 2,389 square feet of floor space. The City of Racine dispatch equipment currently consists of four dispatch consoles and two telephone consoles. The dispatch consoles are capable of taking calls and dispatching service vehicles, while the telephone consoles can only take incoming calls and transfer them to a dispatch console. In addition to utilizing the existing City system, the consolidated operation would require the purchase of a six-position Motorola Centracom Gold Series Console. The existing City equipment would also require a Motorola Gold Series upgrade in order to be compatible with the new equipment. The new operation would be able to utilize the existing central electronics bank located at the City facility. It was also recommended that two additional telephone consoles be added at a cost of approximately \$14,000. The stations would be sufficient to accommodate up to 14 dispatchers on duty at a given time. As mentioned previously, the county equipment would require 911 and telephone console upgrades and primary radio equipment upgrades totaling \$840,000. The county has already considered a microwave system upgrade at a cost of \$2.25 million. This upgrade would be able to serve the consolidated operation.

The level of service provided by the consolidated dispatch center could be greatly enhanced by the addition of a global positioning system based (GPS) automatic vehicle locator (AVL) system. This system would allow dispatch personnel to monitor the location of all emergency vehicles in the county. At a minimum, this system would include all municipal police and Sheriff's Department patrol cars. Ideally, all major emergency vehicles, including fire engines and ambulances, would contain AVL units. A Lynx Track System from GeoComm in St. Cloud, Minnesota could be installed at the dispatch facility for a cost of \$40,000. In addition, it would cost approximately \$171,000 to equip all marked police patrol vehicles in the county (Table 8). All other major emergency vehicles including fire engines and ambulances could be equipped for an additional cost of \$121,000. It is not anticipated that support vehicles such as tanker trucks or fire chief automobiles would be initially equipped with AVL units. However, the County could equip as many additional vehicles as it deems necessary at an incremental cost of \$1,895 per unit.

In addition to the primary dispatch center located in the City of Racine Police Station, the County would continue to maintain the existing County dispatch center as a backup center. This center would contain minimal dispatch equipment and would only be used in the event of a major emergency, such as natural disaster or loss of both primary and backup electrical service to the primary dispatch center. The backup location would contain the existing County Sheriff's Department dispatch equipment, except for the computer consoles, which would be moved to the new dispatch center. Thus, if the backup center were to be used, dispatchers would have to keep paper records of calls. There would not be any investment required to equip this center.

The total capital investment required for the consolidated operation would be approximately \$4.2 million (Table 9). However, the entities currently providing dispatch service will spend approximately \$5.1 million if the consolidation does not occur. Therefore the overall savings to county residents in near-future capital investments would be approximately \$939,000. The addition of AVL technology for police patrol vehicles would cost approximately \$210,550. A consolidated center could upgrade its dispatch equipment to use the latest technology and add an AVL system for even greater efficiency and still have a net savings of \$728,000 in capital investments compared to the level of investment needed for current dispatch providers.

The combined operation will have a total of ten full dispatch positions and four call-taking positions. Each dispatch station would include a monitor that would display the location of emergency incidents and emergency vehicles. The new facility would be equipped with the latest technology and would be capable of providing a high quality of dispatch service.

GOVERNANCE

There are several potential governance structures for a consolidated dispatch center in Racine County. Although it is not the purpose of this study to recommend a particular governance structure, interviews were conducted with current dispatch providers in Racine County and the managers of consolidated dispatch centers in other counties to discuss alternative governance structures. The interviews suggested three options for consideration:

The Racine County Sheriff could have sole authority over the operations of the dispatch center, including hiring, budgeting, and policies and procedures. Under this option the County would fund the entire operation.

The County Board could oversee the dispatch center, with a manager to run the day-to-day operations and report to the Board. This manager could be a civilian hired by the County Board. The County would fund the entire operation under this alternative as well.

Racine County and the City of Racine could form a quasi-governmental board to oversee the dispatch center, with representatives from both the City and the County. The manager of the daily operations could be a civilian hired by the board. Funding could be provided entirely by the County or by a joint City and County arrangement.

A consolidated dispatch center would realize the same cost savings under any of the alternative governance structures described above. However, the selected governance structure may impact both the operational efficiency and the level of satisfaction among participating municipalities and public safety agencies.

EXPERIENCES OF OTHER COUNTIES WITH CONSOLIDATED DISPATCH OPERATIONS

Interviews were conducted with the managers of four consolidated dispatch centers in Wisconsin and Minnesota to learn about the organizational structures used and the advantages and disadvantages experienced with a consolidated dispatch center. The findings of these interviews are briefly summarized here. A more detailed description can be found in Appendix 2.

Kenosha City/County Joint Services Center—the City of Kenosha and Kenosha County operate a joint services center that includes a consolidated dispatch center serving most of Kenosha County. Dispatchers are civilian personnel employed by the Joint Services Center rather than the City or the County. The City and the County each fund 50% of the Joint Services Center budget. A Joint Services Board, headed by the Kenosha County Executive and composed of the County Board and the Mayor of the City of Kenosha, oversees the operations of the joint dispatch. The Director of the Joint Services Center runs the day-to-day operations and reports to the Joint Services Board. In addition, dispatch procedures and policies are determined by the Management Control Board, composed of the City of Kenosha Chief of Police, the County Sheriff, the City of Kenosha Fire Chief and the Director of the Joint Services Center.

Rock County Communications Center—Rock County operates a consolidated dispatch center for the entire county. The County employs the dispatch operators and the Director of the Communications Center, who reports directly to the County Administrator. The 911 Communications Commission, composed of the Chiefs of the Janesville and Beloit Police and

Fire Departments, the County Sheriff and the heads of several smaller police and fire departments throughout the county, establishes overall dispatch policies and procedures.

Meeker County, Minnesota, Consolidated Dispatch—the Meeker County Sheriff's Department provides dispatch service for the entire county. The dispatchers are civilian employees who report directly to the Chief Deputy Sheriff. The Chief Deputy sets policies related to dispatch procedures and oversees the daily operations of the center.

Itasca County, Minnesota, Consolidated Dispatch—the Itasca County Sheriff's Department provides dispatch service for the entire county. The Dispatch Supervisor reports to the Sheriff and the Chief Deputy Sheriff.

The four agencies interviewed have experienced the following advantages from consolidating dispatch service:

Cost savings from reducing the number of dispatchers and dispatch consoles and locating all personnel and equipment in one room.

Having all dispatchers work together in one room and having them all cross trained in dispatch procedures for all types of squads and all areas of the county allows for better coverage of incidents. If a dispatcher is sick, or has to leave the console for a short period or becomes overloaded with calls, any other dispatcher can fill in or provide backup.

Having dispatchers devoted solely to dispatch allows them to focus on dispatch and provide better service.

Consolidating dispatch service facilitates the purchase of state-of-the-art Computer Aided Dispatch (CAD) equipment that interfaces with communication equipment. This means that the dispatcher doesn't have to interrupt the handling of emergency calls to dial the local police, fire and rescue departments.

Consolidated dispatch service works well with computerized vehicle tracking systems that make it easy to dispatch the nearest unit and reduce response times.

The above improvements in efficiency help reduce response times and enhance public safety.

Consolidated dispatch operations also have some difficulties and disadvantages, as indicated by the interviews:

If the dispatch center is a civilian operation, there may be problems working with the police, fire and rescue departments.

There may be a perception that one or more law enforcement, fire or rescue agency receives preferential treatment in terms of setting policies or being chosen to respond to incidents.

When the transition is made to consolidated service, the dispatchers and local departments have to work together to make sure that dispatchers are cross trained to dispatch all types of units and are familiar with procedures for all of the local departments.

Vehicle tracking systems do not work properly unless all departments are willing to use the equipment.

If properly implemented, a consolidated dispatch center results in cost savings and improved dispatch efficiency and emergency response times. It does so by eliminating extra equipment

and facility space devoted to dispatch, reducing the number of personnel, facilitating communication between equipment and dispatchers, and allowing for the most efficient utilization of emergency response units over a larger region. In order to fully realize the benefits of consolidation, the dispatch agency must direct a high level of attention to the training of dispatch operators and communication and cooperation between law enforcement, fire protection, and rescue agencies.

OPERATIONAL ADVANTAGES OF A CONSOLIDATED DISPATCH SERVICE

Consolidating dispatch operations will impact more than just the operating costs of providing the service. Based on the experience of other consolidated dispatch centers and interviews with dispatch and law enforcement professionals in Racine County, consolidation also offers the potential for increased operational efficiency and enhanced public safety. In general, the location of a larger group of dispatch personnel in one location allows the dispatch provider greater staffing flexibility, improved coverage of incidents, and opportunities for better training and increased competency of the dispatch personnel. The following section describes problems with the existing situation in Racine County and the potential advantages of a consolidated dispatch center.

Just as the police, fire and rescue squads must be ready to respond to a request for service at any hour, the provider of dispatch service must have someone at the phone, ready to respond, twenty-four hours a day, seven days a week. In general, smaller municipalities usually rely on the County Sheriff's department for all their dispatch service. In larger municipalities, the local police department or fire department may provide dispatch service or contract with another adjacent municipality to provide service. However, even those departments with their own dispatch service need to rely on the County Sheriff for dispatch during those hours when their own personnel aren't on duty or for backup if the local dispatch becomes inundated with calls.

In counties such as Racine County, where several municipalities maintain their own dispatch service, two different entities (the County Sheriff and the local police department) maintain dispatch departments for the same geographic area. This situation may create inefficiencies in providing dispatch service and may also reduce the effectiveness of dispatch service under certain circumstances. For example, the County receives all 911 calls placed from cellular phones anywhere in the County, even within municipalities with 24-hour dispatch operations. The Sheriff indicated that with the increasing use of cell phones, calls are often being made to different dispatch centers for the same incident. For example, a property owner in the Town of Caledonia might place a call to the Town dispatch center for an accident in front of his house while at the same time someone driving by in a car may be calling on a cell phone to the county center. This means that many of the cellular 911 calls relate to incidents already called in to one of the local dispatch agencies. Since the Sheriff's Department dispatchers do not know whether a unit has been dispatched to the scene, they must contact the local department to determine the status of the situation. Communication between two agencies takes more time than would be needed if a single agency handled the response. As cellular phone use continues to increase, this type of situation will arise more often.

Another inefficiency arises from the fact that the local dispatcher only dispatches the local police, fire or rescue units. In some situations, a county deputy may be closer to the scene, but the local dispatcher doesn't monitor the location of county sheriff's deputies and would not be aware of that fact. Not only is this inefficient, but it increases response time and may result in more property loss or greater injury to the person in need of emergency services. A joint dispatch center would allow the dispatcher to dispatch the nearest unit available. It would also facilitate the use of Geographic Information Systems technology to automatically track the location of all units. Each emergency vehicle in the County could be equipped with an automatic vehicle locator (AVL) that can be connected to the two-way radio. The AVL in each unit then

sends periodic bursts of data including the unit ID, status and location, to a computer in the dispatch center that tracks the position of all units. The dispatcher's computer screen then shows a map of the area, with each unit represented by a small picture of a vehicle at its location on the map. The map also shows the location of calls and 911 cellular calls, allowing the dispatcher to quickly determine the closest available units. This system has the added advantage of reducing radio communication by replacing voice transmission of status and location with instantaneous electronic data transmission.

The presence of several smaller dispatch units means that each local department that provides its own dispatch service also needs to provide training for dispatch personnel. A larger, countywide or area-wide dispatch provider may be able to achieve economies of scale not available to smaller units in the training and cross training of personnel. For example, a larger dispatch unit can include several dispatch personnel in one training session or meeting. Smaller dispatch providers may not have enough personnel to justify certain types of training or may have to make special arrangements to provide joint training sessions with other providers. There are, however, schools and training agencies that offer courses and seminars to dispatch personnel that can serve as a resource for smaller departments.

Small dispatch centers receive a lower volume of calls and therefore staff their centers with fewer personnel per shift. This may affect the quality of service and limit staffing flexibility in several ways. In the extreme case, a department may not receive enough calls to provide full-time work for even one person. However, there must still be someone available to take and dispatch calls, so the dispatcher fills in the down time with other tasks. It is the opinion of professionals in the field that dispatchers are able to provide better service when they work in an environment that has enough dispatch activity so that dispatchers can work exclusively on dispatch functions rather than sharing time with non-dispatch duties. A consolidated center would handle enough calls that all dispatch personnel could devote their time exclusively to dispatch duties.

Even in cases where there is enough work for one full-time dispatcher per shift, the dispatcher may have no backup or very limited backup. A single person cannot remain at the console constantly for an uninterrupted eight-hour shift. During the short periods that the dispatcher is away from the console, the console may be unattended or another person may fill in until the dispatcher comes back. In either situation, it is possible that a person who calls while the main dispatcher is on break might not receive the same high quality service as they would from the main dispatch person. The dispatcher would also have no backup or very limited backup if several calls come in at the same time or if a situation required simultaneous communication with the caller and one or more response units. A smaller dispatch center also has less flexibility to maintain sufficient staffing levels during a disaster situation or to cover shifts when an employee is sick or absent. A larger dispatch operation would have a larger pool of dispatch personnel to call upon for any of the above situations.

For these reasons, larger dispatch centers are more likely to provide consistent high quality service through better-trained and competent specialized dispatch service personnel and sufficient staffing levels.

A situation where the local municipality provides its own dispatch service during limited hours and relies on the County to cover the other hours creates the potential for other inefficiencies as well. First, the local dispatcher and the county dispatcher must coordinate the transfer of responsibility for a call if the local dispatcher's shift ends during the middle of a lengthy incident. Second, the local municipality may change its hours of dispatch service or its staffing level, which affects the level of demand placed on the county dispatch. As the agency responsible for filling any gaps in dispatch service countywide, this element of unpredictability

may make it difficult for the County Sheriff's Department to plan for future personnel, space and equipment needs.

Overall, a consolidated dispatch center has the potential to provide for better and more consistent dispatch service throughout the County. This would happen as a result of improving communication between dispatchers and emergency personnel and making more efficient use of emergency personnel and resources.

<u>POTENTIAL DISADVANTAGES AND DIFFICULTIES IN IMPLEMENTATION OF A</u> CONSOLIDATED DISPATCH OPERATION

Given all of its potential advantages, a consolidated county dispatch center may have some disadvantages as well. A larger operation working with a greater number of local public safety agencies may find it more difficult to work with all of the individual agencies it serves. Each of the dispatch and law enforcement personnel interviewed for this study believed that a consolidated center would be more efficient, but they also had concerns about the management structure of such an operation.

Under the existing arrangements, local dispatchers work with local police, fire and rescue departments in limited geographic areas. The dispatchers become familiar with the local features, alternate names for places and roads and known high-incident areas. They also have an established method of working with the local public safety agencies and know the types of information requested by the agencies and their standard operating procedures. Some of this information may be lost in the transition to a consolidated operation. Even if the joint dispatch provider employs the existing dispatchers, most of the dispatchers at the countywide entity will not be familiar with the procedures of each particular public safety agency or the local names and places. As a result, the local police, fire and rescue service agencies may have difficulty communicating with dispatchers or perceive that the joint dispatch center does not provide the same kind of individualized service that they were accustomed to.

Another potential disadvantage is the negative perceptions that other law enforcement agencies might have regarding the larger role of the County Sheriff's Department with a consolidated dispatch center. The Sheriff's role would probably increase for two reasons. First, the Sheriff's Department already provides dispatch service for a majority of the geographic area of the County and operates the emergency warning systems for the County. In addition, the Sheriff provides some level of law enforcement throughout the County, even in those municipalities with their own police department. Therefore, the County would probably be the logical choice as the agency to operate the joint facility. In addition, if a single center handles dispatch for all public safety agencies, it is likely that Sheriff's deputies would be dispatched more frequently. As mentioned earlier, local dispatchers currently dispatch their own local units even if a Sheriff's deputy is closer to the scene because they do not track the location of deputies. Dispatchers at a consolidated center would dispatch the nearest unit, regardless of jurisdiction. This offers the advantages of greater efficiency and quicker response time. However, it also means that the Sheriff's deputies would be dispatched in cases where they are the closest unit, which is likely to increase the number of times that Sheriff's deputies are dispatched to incidents in municipalities where they are not the primary law enforcement agency. Local law enforcement agencies might perceive this situation as a reduction in their influence, both in their control of dispatch procedures and the ability to respond to and control incidents taking place in their own jurisdiction.

As mentioned earlier, many of the difficulties can be overcome or reduced by carefully selecting the governance structure and fostering communication between the dispatch agency and the public safety agencies. Thorough training of dispatch personnel in the procedures of all the different public safety agencies and the acceptance of input from these agencies in the establishment of policies and procedures by the dispatch agency would improve the perception of responsiveness and service.

CONCLUSION

Based upon the analysis presented in this report, a consolidated operation would provide overall annual savings in personnel and operating costs for dispatch services on a countywide basis. The estimated saving for personnel and operating costs would be \$349,000 per year. It is possible that additional savings in these costs can be recognized as the County realizes operating efficiencies that may result from the consolidated operation.

It is anticipated that significant savings could be made in the area of capital investment in dispatch equipment. If dispatch services continue to be provided under the existing service arrangements, significant investments will be required to update equipment. Consolidating the dispatch services would require a lower total investment in equipment than the sum of the capital needs of each individual service provider. An initial savings of approximately \$929,000 could be realized if an investment is made in a consolidated dispatch operation. In addition, future savings would occur as equipment is added or replaced. The consolidated facility with the inclusion of a complete AVL system would result in net savings of \$598,000 and would offer a higher level of technology than exists in any of the current dispatch centers in Racine County.

In addition to the opportunities for cost savings, a consolidated dispatch operation would be likely to provide for greater efficiencies in the utilization of dispatch and public safety personnel, equipment and vehicles. The large centralized staff associated with a consolidated center would allow for greater staffing flexibility, improved coverage of calls, better training and the development of a highly skilled team of dispatch specialists. The new technology utilized would improve efficiency and accommodate implementation of the policy that the nearest patrol vehicle should respond to an emergency. These features would result in a higher level of service, quicker response times and enhanced public safety for residents of the entire county. This becomes more important as residents increasingly spend their time in numerous municipalities during the course of a given day or week. A centralized dispatch center would ensure more uniform service and response times across the county.

The cost savings combined with the opportunity for a higher level of service and public safety offer significant advantages over the existing dispatch service arrangements in the County. It is recommended that serious consideration be given to the option of providing a consolidated dispatch service to residents of Racine County. This report has offered suggestions as to the location, staffing levels and equipment needs of a consolidated dispatch center. Should the governmental units in Racine County decide to pursue the formation of a consolidated dispatch center, it is further recommended that careful consideration be given to the governance structure of the center and to methods for fostering communication between dispatch personnel and public safety agencies and soliciting input on dispatch policies and procedures. This will help ensure that a consolidated dispatch center achieves not only the projected cost savings but the anticipated improvements in efficiency and service as well.

Table 1
Racine County Intergovernmental Cooperation Study
Dispatch Study
Dispatch Service Providers

Dispatch Service Provider

Municipality	Police	Fire	Rescue
Town of Burlington	Town, County (1)	County	County
Town of Caledonia	T. Caledonia	T. Caledonia	T. Caledonia
Town of Dover	County	County	County
Town of Mt. Pleasant	T. Mt. Pleasant	T. Mt. Pleasant	T. Mt. Pleasant
Town of Norway	County	County	County
Town of Raymond	County	County	County
Town of Rochester	County	County	County
Town of Waterford	County	County	County
Town of Yorkville	County	County	County
Village of Elmwood Park	County	County	County
Village of North Bay	County	County	County
Village of Rochester	County	County	County
Village of Sturtevant	V. Sturtevant	V. Sturtevant	V. Sturtevant
Village of Union Grove	County	County	County
Village of Waterford	County	County	County
Village of Wind Point	C. Racine	C. Racine	C. Racine
City of Burlington	C. Burlington	C. Burlington	C. Burlington
City of Racine	C. Racine	C. Racine	C. Racine

Entities Providing Dispatch Service

Town of Burlington Town of Caledonia Town of Mt. Pleasant Village of Sturtevant City of Burlington City of Racine Racine County

1. Some police calls are dispatched by Town.

Table 2
Racine County Intergovernmental Cooperation Study
Dispatch Study
Personnel Summary

	Full-time	Part-time	Full-time	Annual Personnel	Dispatcher Hourly Rate	Dispatcher Average
Dispatch Center	Personnel	Personnel	Equivalent (1)	Costs	Range (2)	Hourly Rate
Town of Burlington	0	2	0.30	\$10,359	\$9.55	\$9.55
Town of Caledonia (1)	7	4	4.40	\$166,092	\$10.39-\$16.31	\$13.22
Town of Mt. Pleasant	7		7.00	\$300,486	\$12.87-\$15.36	\$14.54
Village of Sturtevant	4	2	6.00	\$153,260	\$10.51-\$13.80	\$11.76
City of Burlington	4	2	4.25	\$166,333	\$8.58-\$11.85	\$11.07
City of Racine	28		28.00	\$1,328,997	\$14.24-\$18.67	\$16.86
Racine County	18		18.00	\$920,279	\$14.65-\$18.21	\$16.91
Total	68	10	67.95	\$3,045,806	\$9.55-\$18.67	\$15.55

- 1. A full-time equivalent is one dispatch person working 40 hours per week.
- 2. County wage range excludes sergeant at \$27.23 per hour. City of Racine excludes Director of Emergency Services, Admin. Asst. and Training Coordinator Supervisor.
- 3. Town of Caledonia states that personnel spend 50% of time on dispatch and 50% on other duties.

Table 3
Racine County Intergovernmental Cooperation Study
Dispatch Study
Operating Costs Summary (1)

	Annual Operating	Number of Dispatch	Building Area	Annual Building	Total Annual
Dispatch Center	Costs	Consoles	SF	Costs	Costs
Town of Burlington	\$8,400	1	100	\$1,000	\$9,400
Town of Caledonia	\$17,312	2	350	\$3,500	\$20,812
Town of Mt. Pleasant	\$27,500	1	168	\$1,680	\$29,180
Village of Sturtevant	\$50,931	2	500	\$5,000	\$55,931
City of Burlington	\$23,540	1	150	\$1,500	\$25,040
City of Racine (2)	\$57,300	4	1200	\$12,000	\$69,300
Racine County	\$68,142	4	900	\$9,000	\$77,142
Total	\$253,125	15	3368	\$33,680	\$286,805

- 1) Does not include personnel costs.
- 2) The City of Racine has two telephone consoles in addition to the dispatch consoles listed here.

Table 4
Racine County Intergovernmental Cooperation Study
Dispatch Study
Summary of Current Service Costs

	Annual Personnel	Annual Operating	Total Annual
Dispatch Center	Costs	Costs	Costs
Town of Burlington	\$10,359	\$9,400	\$19,759
Town of Caledonia	\$166,092	\$20,812	\$186,904
Town of Mt. Pleasant	\$300,486	\$29,180	\$329,666
Village of Sturtevant	\$153,260	\$55,931	\$209,191
City of Burlington	\$166,333	\$25,040	\$191,373
City of Racine	\$1,328,997	\$69,300	\$1,398,297
Racine County	\$920,279	\$77,142	\$997,421
Total	\$3,045,806	\$286,805	\$3,332,611

Table 5
Racine County Intergovernmental Cooperation Study
Dispatch Study
Investment In Dispatch Equipment

	Estimated	Estimated	Estimated
Dispatch Provider	Current Investment	Average Age	Future Investment
Town of Burlington	\$100,000	5-20 years	\$40,000
Town of Caledonia	n.a. ⁽¹⁾	n.a. ⁽¹⁾	\$500,000 ⁽³⁾
Town of Mt. Pleasant	n.a. ⁽¹⁾	n.a. ⁽¹⁾	\$500,000 ⁽³⁾
Village of Sturtevant	\$41,000	1-7 years	\$10,000 ⁽²⁾
City of Burlington	n.a. ⁽¹⁾	2 - 17 years	\$62,500
City of Racine	\$703,000	9 years	\$0
Racine County	n.a. ⁽¹⁾	n.a. ⁽¹⁾	\$3,990,000
Total	-	-	\$5,102,500

- 1. Existing equipment is considered obsolete and new investment in equipment is required.
- 2. This figure does not include the cost of upgrading 911 software and hardware or a new radio system, as the Village does not have a cost estimate for those items at this time.
- 3. Information provided by the Town of Caledonia and the Town of Mount Pleasant.

Table 6
Racine County Intergovernmental Cooperation Study
Dispatch Study
Average Dispatch Calls Per Day

Dov	Current	All	Combined	Ratio	Ratio
Day	County	Other	Total	Other:County	Combined:County
Sunday	146	364	510	249%	349%
Monday	162	371	533	229%	329%
Tuesday	158	422	580	267%	367%
Wednesday	157	419	576	267%	367%
Thursday	160	428	588	268%	368%
Friday	171	448	619	262%	362%
Saturday	162	414	576	256%	356%
Weekly Total	1,116	2,866	3,982	257%	357%
Average	160	410	570	256%	356%

Table 7
Racine County Intergovernmental Cooperation Study
Dispatch Study
Estimated Personnel Needs and Costs

a. Personnel Needs

	Estimated
	Annual Calls
Town of Burlington	3,186
Town of Caledonia	19,956
Town of Mt. Pleasant	30,343
Village of Sturtevant	10,743
City of Burlington	10,701
City of Racine	78,107
Racine County	58,180
Total	211,216
Annual Calls Per Dispatcher (1)	3,800
Total Dispatchers Needed	56
Supervisors	2
Total Employees	58
Dianatah ang/Ohiff	40
Dispatchers/Shift	13
Estimated 15% Off Duty (2)	2
Dispatchers On Duty	11

b. Personnel Costs

				Benefits	
Position	Number	Rate	Wages	& Other	Total
Dispatchers	56	\$16.90	\$1,953,859	\$722,928	\$2,676,787
Supervisors	2	\$27.00	\$112,320	\$41,558	\$153,878
Total	58		\$2,066,179	\$764,486	\$2,830,665

c. Dispatch Personnel - Other Counties

	Population	FTE	Population
County	Served	Personnel (3)	Per Dispatcher
Broome Co. (NY)	178,500	42	4,250
Onondaga Co. (NY)	480,000	134	3,582
Ulster Co. (NY)	139,304	18	7,739
Dutchess Co. (NY)	245,000	44.5	5,506
Kenosha Co. (WI) (4)	119,065	33	3,608
Rock Co. (WI)	145,374	40	3,634
Subtotal	1,307,243	311.5	4,197
Racine Co.	187,502	58	3,233

- 1. Based on an average of 2 calls per working hour per dispatcher.
- 2. Vacation days, sick days, holidays.
- 3. Includes supervisors.
- 3. Excludes Pleasant Prairie and Twin Lakes.

Table 8
Racine County Intergovernmental Cooperation Study
Dispatch Study
Costs For Automatic Vehicle Locator (AVL) System

	Units	\$/Unit	Cost (1)
Receiver and Stations		A.	\$40,000
Police Patrol Car Units	90	\$1,895	\$170,550
Total			\$210,550
Primary Fire and Rescue EMV Units (2)	64	\$1,895	\$121,280
Total Including All EMVs			\$331,830

- 1. Price quoted for Lynx Track System by GeoComm, St. Cloud, MN
- 2. Excludes support vehicles such as tanker trucks, fire chiefs car, etc.

Table 9
Racine County Intergovernmental Cooperation Study
Dispatch Study
Comparison of Capital Costs for Consolidated Center versus Current Providers

Capital Investment Required for Consolidated Operation

Item Description	Dollar Amount
Six Position Motorola Centracom Gold Series Consoles	\$1,000,000
Upgrade City Equipment to Motorola Gold	\$60,000
911 Upgrade and Telephone Consoles	\$514,000
Replace Sheriff Primary Radio Equipment	\$340,000
Microwave System	\$2,250,000
Total	\$4,164,000
Capital Cost Avoided by Existing Dispatch Operations	
Town of Burlington	\$40,000
Town of Caledonia	\$500,000
Town of Mt. Pleasant	\$500,000
Village of Sturtevant	\$10,000
City of Burlington	\$62,500
City of Racine	\$0
Racine County	\$3,990,000
Total	\$5,102,500
County-Wide Savings	\$938,500
Lynx Track AVL System (1)	\$210,550

Notes:

Net County-Wide Savings

1) Includes cost to equip the dispatch center and police and Sheriff's Department patrol cars. Excludes the cost to equip fire and rescue vehicles.

\$727,950

Figure 1
Average Dispatch Calls By Time of Day, 1999
Sunday

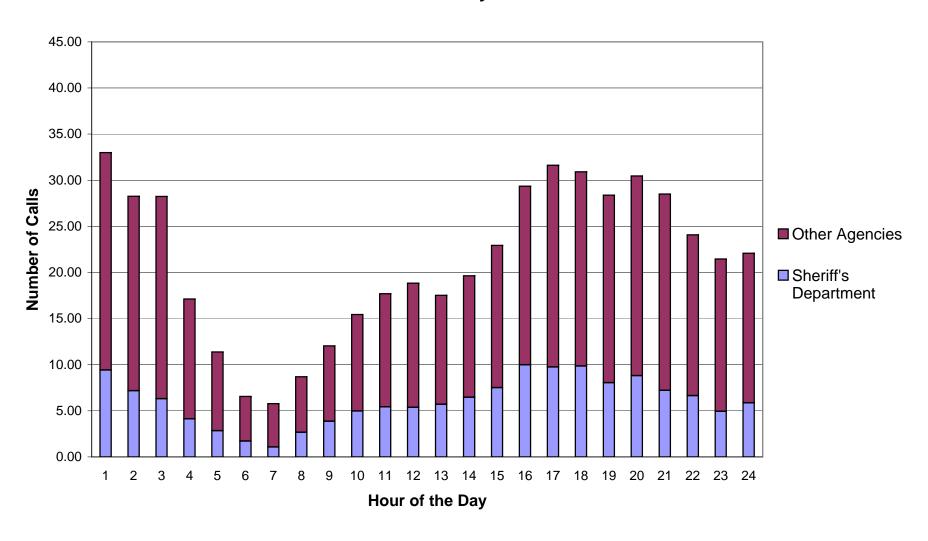


Figure 2
Average Dispatch Calls By Time of Day, 1999
Monday

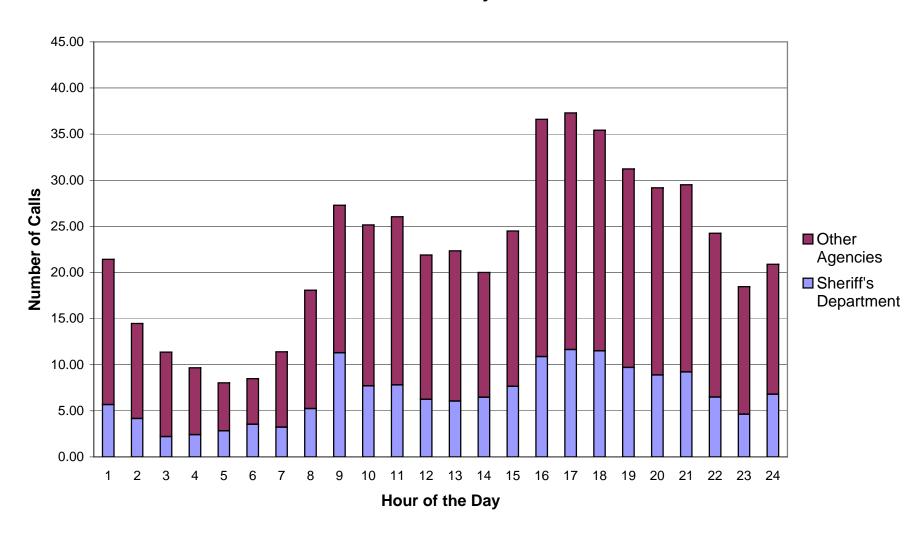


Figure 3
Average Dispatch Calls By Time of Day, 1999
Tuesday

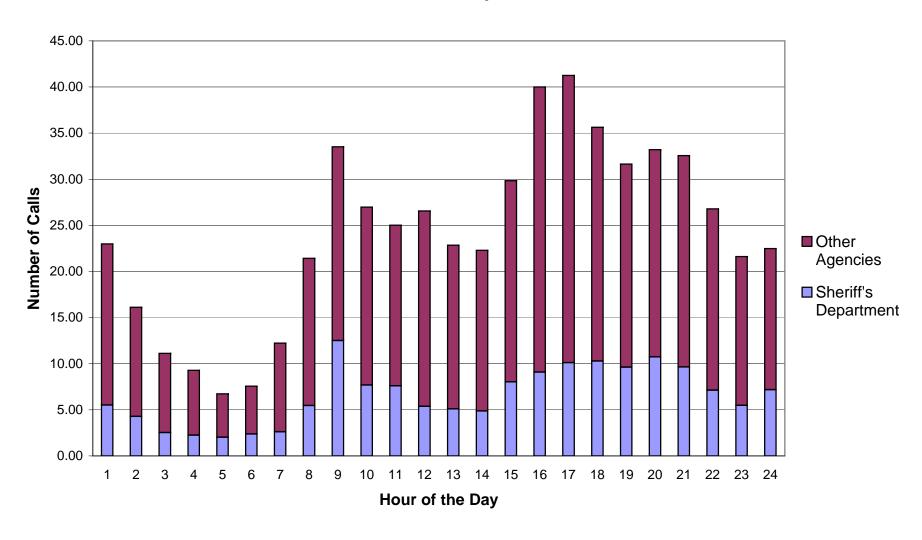


Figure 4
Average Dispatch Calls By Time of Day, 1999
Wednesday

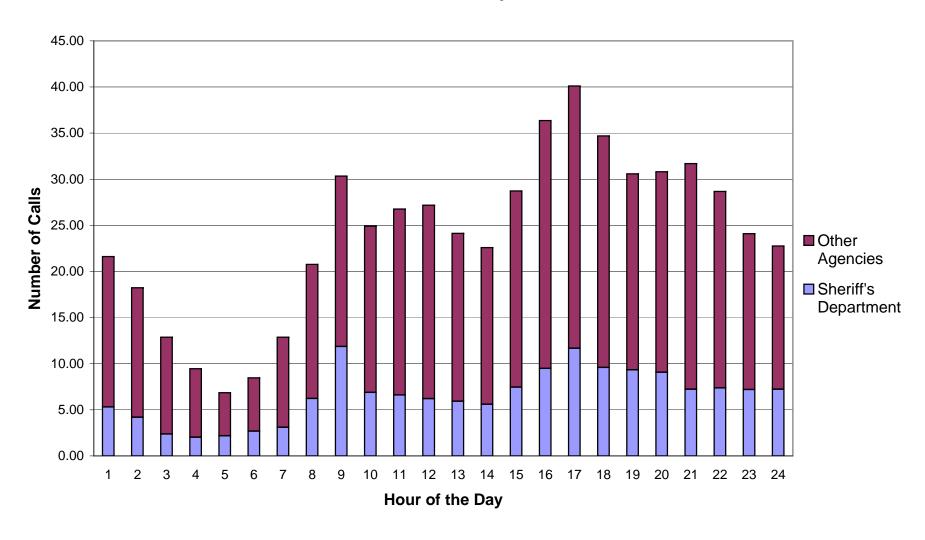


Figure 5
Average Dispatch Calls By Time of Day, 1999
Thursday

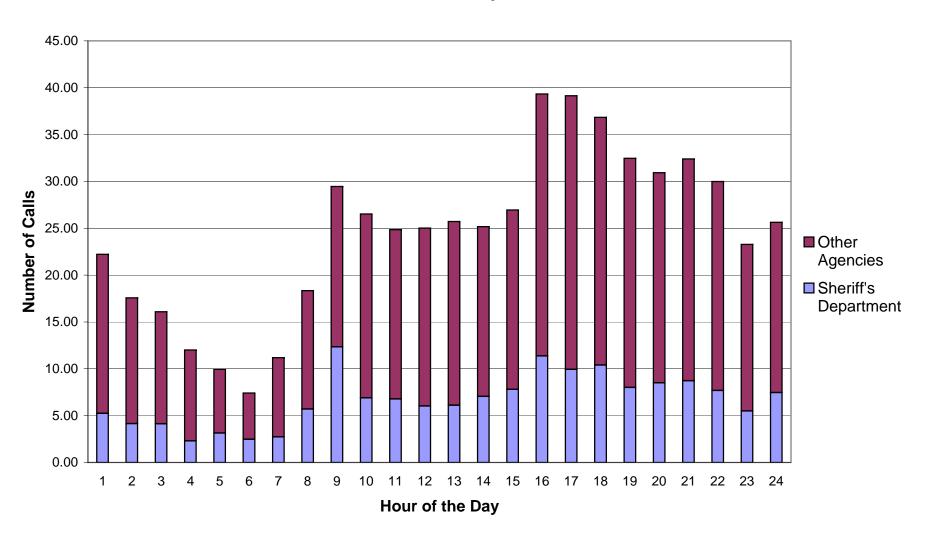


Figure 6
Average Dispatch Calls By Time of Day, 1999
Friday

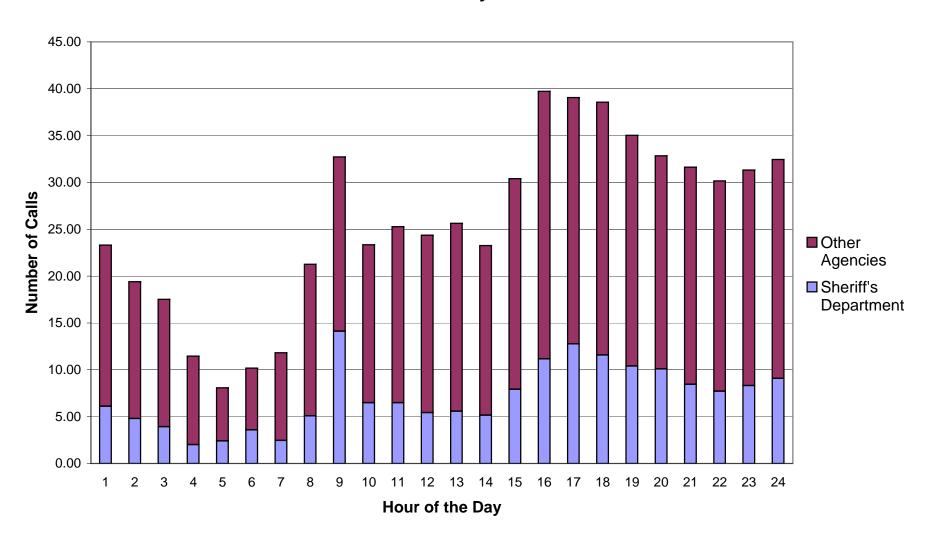


Figure 7
Average Dispatch Calls By Time of Day, 1999
Saturday

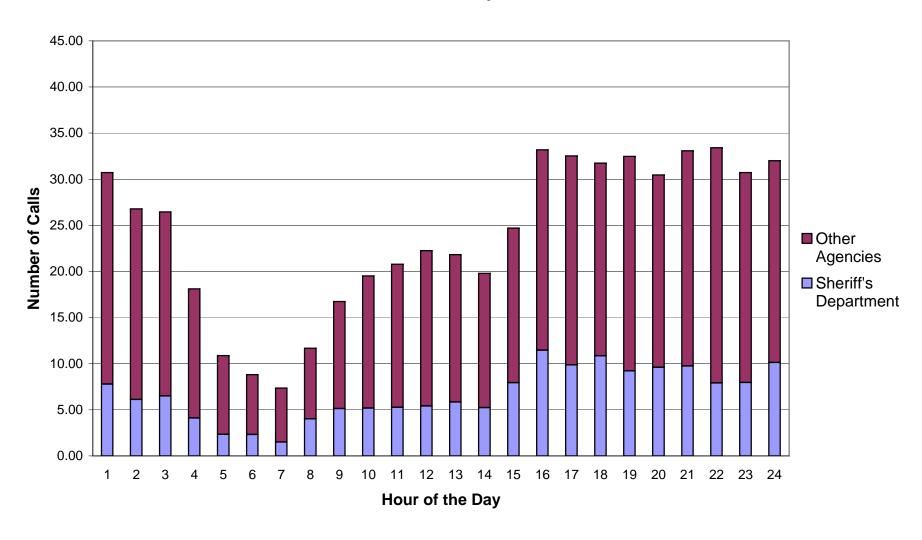
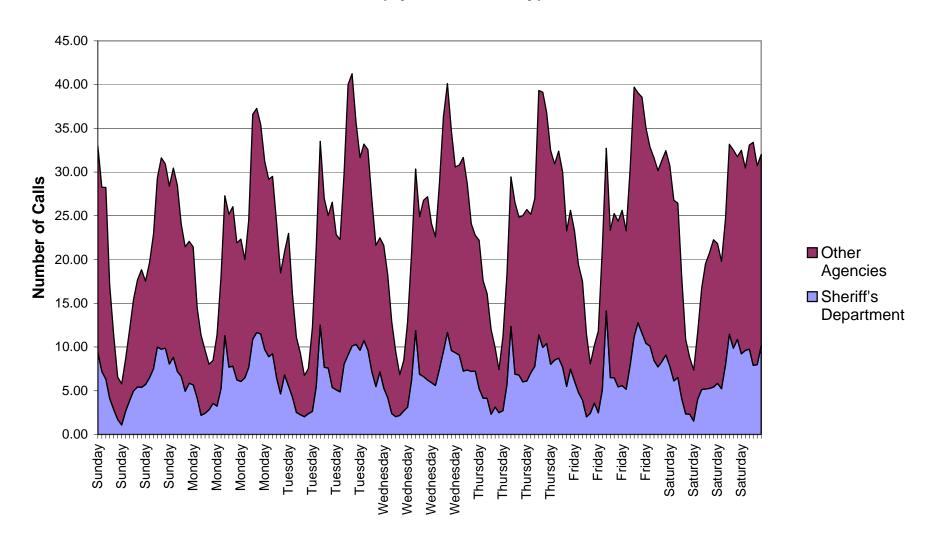


Figure 8
Weekly Dispatch Call Activity, 1999
(By Hour and Day)



APPENDIX 2

CITY OF RACINE INTERGOVERNMENTAL RELATIONS STUDY CONSIDERATION OF A CONSOLIDATED RACINE COUNTY DISPATCH SERVICE

FINDINGS FROM SURVEY OF CONSOLIDATED DISPATCH CENTERS

As part of this dispatch analysis, Ruekert/Mielke investigated other centralized, or countywide, dispatch services operating in Wisconsin and Minnesota. Interviews were conducted with the dispatch managers for the Rock County, WI consolidated dispatch system, the Kenosha City/County, WI Joint Services Center, the Meeker County, MN consolidated dispatch system and the Itasca County, MN consolidated dispatch system. These interviews focused on basic information about the services and the managers' analysis of the advantages, or successes, and the caveats and remaining problem areas associated with these consolidated dispatch operations.

Kenosha City/County, WI Joint Services Center

<u>Functions</u>, <u>Hours and Extent of Operations</u>

The Kenosha City/County Joint Services Center (Joint Services Center) and its dispatch operations are located in downtown Kenosha and have been in operation since 1982, serving a population of approximately 142,000. The Joint Services Center contains operations and staff for dispatch, records, fleet maintenance, and evidence/identification. The dispatch center itself operates 24 hours a day, seven days per week, 365 days per year in three shifts: 1) 6:00 a.m. to 2:00 p.m.; 2) 2:00 p.m. to 10:00 p.m.; and 3) 10:00 p.m. to 6:00 a.m. The dispatch center is a designated Public Safety Answering Point (PSAP). Therefore, all 911 calls go directly to the dispatch center. The dispatch center, in turn, dispatches all emergency medical squads throughout the County based on these 911 calls. In addition, the dispatch center handles all police, fire and rescue calls for all municipalities in Kenosha County except for the Village of Pleasant Prairie and the Village of Twin Lakes. However, if dispatch operations in these two municipalities are overburdened, the Joint Services Center's dispatchers can handle their calls.

Management and Staffing

The dispatch center operates with a total staff of 33 consisting of a dispatch manager, a training coordinator, three shift supervisors and 28 dispatch operators. Dispatch staff are all civilian workers and are employees of the Kenosha City/County Joint Services Center. They are neither City nor County employees. The dispatch manager reports directly to the Director of the Joint Services Center, who in turn reports to the Joint Services Board. This Board is headed by the Kenosha County Executive and includes the County Board and the Mayor of the City of Kenosha. Sometimes members of the Kenosha City Council or the Mayor's staff sit on this board. The presence of the County Board members provides all of the smaller municipalities with adequate representation on the Joint Service Board. The Joint Services Board meets once per month to oversee budgeting and contract negotiations for a variety of concerns, including dispatch. The 28 dispatch operators are all members of a union (AFSCME); the manager, training coordinator and the three shift supervisors are not.

Budgeting and Salaries

The Year 2000 budget for dispatch operations at the Joint Services Center is \$1,500,000. This amount is funded 50% by the City and 50% by the County. This budget includes salaries and benefits, office supplies, personnel training, equipment purchases and contracts for equipment service and maintenance. The hourly rates for the 28 dispatch operators range from \$12.79 to \$15.98.

Space

The dispatch center is crowded, containing 6 consoles and 2 desks in a space of only 20' x 22' (440 square feet). Space requirements will be increasing considerably as the Joint Services Center plans to hire several more dispatch operators to keep up with a growing workload.

Training

All first year dispatch operators must undergo the standardized 40-hour training program put together by the International Association of Public Safety Communication Officials (APCO). This is followed by a six month communication officers training program that includes crosstraining in police, fire, and rescue squad dispatching, certification in cardiopulmonary resuscitation, emergency medical dispatch training and squad car ride alongs. This training occurs in phases supplemented by checklists and quizzes. Each dispatch trainee must pass each phase.

All dispatch employees, regardless of status, must complete 40 hours of in-service training each year. This training updates dispatch operators on new equipment, new CAD technology, new dispatch procedures and provides more CPR training and more squad car ride-alongs.

Advantages and Benefits of Consolidated Dispatch

According to Dolly Brennan, Dispatch Manager since 1984, a number of advantages and benefits have resulted from the consolidation and centralization of dispatch services in Kenosha County. These are listed below.

- 1. Significant monetary savings have been realized in going from over 60 dispatchers and many rooms of dispatch equipment throughout the various municipalities in Kenosha County to 28 dispatchers in the Joint Services Center with all the equipment in one room (not including Twin Lakes and Pleasant Prairie).
- 2. Switching from a dispatch staff manned by officers to a civilian dispatch staff has resulted in significant savings in terms of salaries.
- 3. The dispatch staff is completely cross-trained. If one dispatch operator is sick, any of the other 28 dispatch operators can take his or her place, regardless of whether the call is for police, fire or rescue services and regardless of the location of the emergency.
- 4. The dispatch center has been able to standardize dispatch communication policies and procedures with the aid of a Management Control Board. This Board, which meets once per month, consists of the City of Kenosha Chief of Police, the County Sheriff, the City of Kenosha Fire Chief and the Manager of the Joint Services Center. It does not include representatives of the smaller municipalities; the Joint Services Board addresses their issues. When the Management Control Board meets, the three chiefs, rather than being adversarial, work out their dispatch procedural problems together with the Manager of the Joint Services Center. It is important to note that, although dispatch has been centralized, all of the various

police, fire and rescue departments remain autonomous. Nevertheless, the Management Control Board has helped lessen conflicts over issues of territoriality and control since it provides a forum for the departments to maintain a strong "say" in dispatch procedures.

- 5. The duties of the dispatchers at the Joint Services Center do not include manning the front desk or managing the records and warrant data. Other Joint Services Center employees are assigned to these functions. Therefore, unlike dispatch operators in many smaller municipal dispatch centers, the Joint Service Center dispatch operators are totally focused on handling calls and dispatching police, fire and rescue squads out to County residents. However, as the Joint Services Center also contains the Joint City/County Records Department, the dispatch operators have immediate access to that data if they need it.
- 6. Consolidation of dispatchers, equipment and computers in one location has led to increased efficiencies in dispatch operational flow and emergency response time. Since the communications equipment and software are interfaced with one another, the dispatch operators do not have to interrupt the handling of emergency calls by picking up another phone and separately dialing the individual police, fire and rescue squads. Moreover, since the dispatchers are all in one room they can also communicate much more quickly and readily with each other. This interfacing of equipment and dispatchers in one location has saved considerable time for calls involving multiple emergencies and the dispatching of police, fire and rescue squads to a multiple vehicle accident, major fire or high-speed chase.
- 7. Consolidating dispatch services has allowed for procurement of state of the art dispatch equipment. The dispatch software used by the Joint Services Center is designed to automatically select which agency should respond to the emergency situation.
- 8. The fact that a joint fleet of City of Kenosha Police Department vehicles and Kenosha County Sheriff's Department vehicles are kept together in the Joint Services Center has made it easier for the dispatch operators to coordinate sending out these two squads for major emergencies.

Caveats and Remaining Problem Areas

Ms. Brennan noted a number of problems still being experienced by the dispatch center. These are listed below.

- 1. The dispatch center still encounters problems getting individual police, fire and rescue departments to work together and work with the dispatch operators. Officers and squads in these departments still do not like the idea of a civilian agency involved in establishing dispatch procedures. The Joint Services Center's dispatch operations have found, however, that these problems have tremendously lessened with time.
- 2. There can be animosity toward the dispatch center if individual police, fire and rescue departments perceive that one department is receiving preferential treatment. The Joint Services Center has encountered this sort of animosity because of the perception that the Sheriff's Department was receiving preferential treatment by dispatch operators. Such animosity can impede the flow of dispatch operations.
- 3. Despite the fact that the dispatch operations have been centralized and consolidated, the procedures for dispatching police, fire and rescue squads are all different. Therefore, it is imperative that the dispatch operators be properly trained to ask the various squads the right questions depending on whether they are handling a police, fire or rescue/emergency medical call.

- 4. In light of numbers 3 and 4, above, Ms. Brennan has found that it is very important that all dispatch operators be cross-trained. As well, their early training should include riding along with the police, fire and rescue squads several times to witness how emergencies are handled. Moreover, she recommends that the dispatch operators be rotated frequently so that they learn how to cover and handle all types of calls in every community in the County.
- 5. The Wisconsin Department of Justice offers excellent training in areas relevant to the duties of dispatchers, but sworn officers receive priority for these training programs.

Rock County, WI Consolidated Dispatch Services

Functions, Hours and Extent of Operations

Rock County has consolidated all of its dispatch operations for 911 calls and other emergency calls to serve all municipalities in the County into a single entity, the Rock County Communications Center. The Communications Center, which is a designated PSAP, is located in the northern part of the City of Janesville in the Rock County Complex and serves a county population of approximately 151,000. The Communications Center, its staff and equipment are focused solely on taking calls and handling dispatch operations for 24 police, fire and rescue departments throughout Rock County, 24 hours per day, seven days per week, 365 days per year. Dispatch operations are handled in three shifts: 1) 7:00 a.m. to 3:00 p.m.; 2) 3:00 p.m. to 11:00 p.m.; and 3) 11:00 p.m. to 7:00 a.m. The Center's dispatch operators may access data from the records management services and evidence/identification services but these latter services are totally separate functions with separate staffs. It is estimated that this year the Communications Center will handle about 284,000 calls. The increase in the number of calls is averaging about 2% to 3% annually.

Management and Staffing

The Communications Center operates with a total staff of 40 consisting of a Director, an Operations Manager, a Support Specialist for computer-assisted dispatch (CAD), a Systems Manager for maintenance, three Dispatch Supervisors and 33 dispatch operators. Rock County employs the entire dispatch staff. The Director, David Sleeter, reports directly to the County Administrator. The 911 Communications Commission establishes overall dispatch policies and procedures. This Commission, which meets every two months, consists of the Chiefs of the Janesville and Beloit Police and Fire and Departments, the County Sheriff and the heads of several smaller municipal police and fire departments. Representation on the 911 Commission by the County's smaller communities rotates every few years to ensure that all of the municipalities have a chance to participate in formulating overall dispatch policies and procedures.

Budgeting and Salaries

The Year 2000 budget for dispatch operations at the Communications Center is \$2,317,255, funded entirely by a flat-rate County tax. This budget includes salaries and benefits, office supplies, personnel training, equipment purchases and contracts for equipment service and maintenance. According to the available data from 1999 the hourly rates for first-year dispatch operators start at \$12.46, increase to \$13.17 after six months and climb to \$13.81 after eighteen months. Hourly rates for dispatch operators reach \$14.18 after five years. Lead dispatch operators and supervisors earn between \$15.26 and \$15.57 per hour.

Space

The Communications Center's dispatch operations area is contained in a room measuring approximately 28' x 35' (980 square feet). Mr. Sleeter stated that the center could easily use another 100 square feet of space to accommodate the growing workload and associated staffing and equipment needs.

Training

Training of first-time dispatch operators occurs over a period varying from 30 to 50 weeks, all accomplished at the Communications Center. It includes 40 hours of orientation to the Communications Center, equipment, policies and procedures and basic job requirements. This orientation includes familiarization with all townships, municipalities and law enforcement agencies served by the Communications Center. Thirty-two hours of emergency medical dispatch classes and a dispatch officers' training program follow this orientation program.

Advantages and Benefits of Consolidated Dispatch

According to the David Sleeter, Communications Director, a number of advantages and successes have resulted from the consolidation and centralization of dispatch services in Rock County. These are listed below.

- 1. Considerable costs savings and some time savings have resulted from locating all of the radio equipment and CAD equipment in one centralized, consolidated facility, rather than having the equipment scattered in a number of smaller, independent, municipal dispatch operations.
- 2. Countywide, there has been some improvement in response time resulting from the fact that the having all of the dispatch operators in one facility, focused totally on dispatch, makes it easier for them to communicate with one another and with the various police, fire and rescue squads.
- 3. Rock County has found that the best way to fund consolidated dispatch services is through a blanket tax levied on each township or municipality that is then paid into a County fund. The original idea was to make the funding formulas population-based because it was thought that this would accurately reflect the demand for dispatch services. However, the need for dispatch services is less a function of total population than the incident rate and types of incidents associated with a particular population or municipality. As well, incident rates can fluctuate significantly within a particular area. The county tax was determined to be a reasonable way to equalize these differences and provide for a fair allocation of costs.

Caveats and Remaining Problem Areas

Mr. Sleeter noted a number of caveats and some problems still being experienced by the dispatch center. These are listed below.

1. Consolidation and centralization of dispatch operations in Rock County did not realize as much cost-savings in terms of labor as had been anticipated. The Rock County 911 Plan and its accompanying 911 Telecommunications Technical Report, both completed in 1991, had projected a need for a total dispatch staff of 20 or 21. However, current staffing totals 40 and Mr. Sleeter stated that the dispatch center could easily use more dispatch operators. He recommended that in considering staffing requirements for a countywide consolidated dispatch center, it is wise to err on the side of overstaffing.

- 2. Police, fire and rescue squads are not using their mobile data equipment as much as had been projected. Therefore, the anticipated improvements this technology was supposed to bestow in terms of more efficient handling of emergencies have not been fully realized.
- 3. It is still sometimes difficult to dispatch squads to the County's more rural areas in an efficient, timely manner. In Mr. Sleeter's opinion this is due primarily to the fact that many of the fire and rescue departments in the more rural areas are small, volunteer agencies that can be understaffed on any given day. Sometimes there are no volunteers at the fire and rescue department buildings to answer the dispatchers' pages. Volunteers may be at home or at work when an emergency occurs. As a result, it can be difficult for the County dispatchers to locate the volunteers. These problems can cause delays in response time when emergencies occur.
- 4. Setting up a consolidated, centralized dispatch operation, even with state-of-the art technology, cannot, by itself, improve response time throughout a county and save lives. The real key to improving dispatch operations is adequate investment in the dispatch operators. This means providing adequate training, increasing salaries to improve the quality of applicants, and hiring good managers and supervisors who can help smooth over day-to-day issues and create a professional atmosphere. Adequate training includes training in CAD and the latest available technologies, emergency medical training so that dispatchers can converse effectively with victims and help save lives until the squads arrive, and cross-training so that each dispatch operator can dispatch any squad anywhere within the center's jurisdiction.

Meeker County, Minnesota

Functions, Hours and Extent of Operations

Meeker County's consolidated dispatch operations are located in City of Litchfield, the major community in this county of 20,000. The dispatch center operates 24 hours per day, seven days per week, 365 days per year in two twelve-hour shifts: 1) 6:00 a.m. to 6:00 p.m. and 6:00 p.m. to 6:00 a.m. The dispatch center receives and handles all 911 calls and all police, fire and rescue calls for all municipalities in the County.

Management and Staffing

The dispatch center operates with a total staff of ten, including five full-time dispatchers, two dispatchers who work 30 hours per week, and three part-time dispatchers who fill in at variable hours. All of the dispatchers are civilian, County employees. There is no director or training coordinator. All of the dispatchers report directly to the Chief Deputy Sheriff. The Chief Deputy handles all technical questions about police, fire and rescue emergencies and dispatch procedures. Joyce Shiroo, one of the full-time dispatchers, stated that the dispatchers typically spend about 95% of their time on actual dispatch duties and about 5% of their time running crime histories and processing hand gun permits.

Salaries

The hourly rates for dispatchers are quite low, ranging from \$10 to \$13 per hour.

Space

The dispatch center is located in a brand new building housing three dispatch consoles and state-of-the-art equipment, a kitchenette and a bathroom. The main dispatch room which houses the equipment and consoles measures 20' x 25' (500 square feet). The kitchenette measures 8' x 6'

(48 square feet) and the bathroom measures 8' x 6' (48 square feet). The total dispatch center area is 596 square feet.

<u>Training</u>

All dispatch training is on the job and takes a minimum of three months. Dispatchers also receive several hours of training in basic first aid and cardiopulmonary resuscitation (CPR). They must be re-certified in first aid every two years and in CPR every 3 years. They are also trained and re-certified every two years by the Bureau of Criminal Apprehension in preparing criminal history files.

Advantages and Benefits of Consolidated Training

According to the Joyce Shiroo, one of the County's dispatchers, a couple of advantages and benefits have resulted from the consolidation and centralization of dispatch services in Meeker County. These are listed below.

- 1. Some cost savings have resulted from having all of the dispatch equipment located in one room.
- 2. The County has improved its dispatch efficiency in rural areas through the use of a computerized GPS squad vehicle tracking system called LynxTrack. This system is installed in the squad vehicles. It sends data bursts that transmit data to the dispatch center about the location of the squad cars and the location of emergency situations. This data is then plotted on GIS maps at the dispatch center. LynxTrack can also be used to show the locations of wireless 911 calls the dispatch center is handling. Moreover, LynxTrack has after the fact replay and analysis features to reconstruct squad car movement.

Caveats and Remaining Problem Areas

Ms. Shirro noted that any time taken away from direct dispatch duties is a hindrance to efficient operation. At Meeker County the dispatchers are responsible for monitoring and opening the exterior jail door. This can interfere with dispatch duties and threaten public safety.

Itasca County, MN Consolidated Dispatch Services

Functions, Hours and Extent of Operations

The County's consolidated dispatch center is located in the County Courthouse in the City of Grand Rapids. Consolidation of dispatch services occurred more than 14 years ago. The center operates 24 hours per day, seven days per week, 365 days per year in two shifts: 1) 6:00 a.m. to 6:00 p.m.; and 2) 6:00 p.m. to 6:00 a.m. The dispatchers handle all 911 calls and all emergency calls for police, fire, and rescue services for all of the County's municipalities. However, the dispatch center does not answer administrative calls for the City of Grand Rapids Police Department during the hours of 8:00 a.m. and 4:30 p.m. on weekdays. Itasca County has a year-round population of about 40,000 but it swells to 100,000 during the tourist season.

Management and Staffing

The dispatch center operates with a total staff of eight, consisting of a dispatch supervisor, four full-time dispatchers and three part-time dispatchers. The Dispatch Supervisor reports directly to the Sheriff and Chief Deputy Sheriff.

Salaries

The hourly rates for the dispatchers range from \$12 to \$16.

Space

The dispatch center occupies an area 16' x 30' (480 square feet) and contains two consoles and the computerized dispatching equipment. There is also a bathroom and a small kitchenette. In Dispatch Supervisor's opinion the space is inadequate. In fact, they are shortly going to be receiving another console.

Training

First year dispatchers are trained undergo approximately two months of in-house training on dispatch procedures and use of equipment. In addition, they are all trained and certified in CPR and Emergency Medical Dispatch (EMD).

Advantages and Benefits of Consolidated Dispatch

According to Randy Olson, the Dispatch Supervisor, a couple of advantages and benefits have resulted from the consolidation and centralization of dispatch services in Itasca County. These are listed below.

All of the new technologies, including the computer-aided dispatch (CAD) and computerized mapping and records systems, are designed to interface with one another in tracking calls, squad cars and emergency locations. Optimal interfacing occurs when all of the equipment and all of the dispatchers are in a single location. Consolidation is practical because it enables this to happen.

In Mr. Olson's opinion, consolidation of dispatch has improved the efficiency with which squads are dispatched to emergencies. He anticipates that dispatch efficiency will further improve once their LynxTrack system has been installed.

Caveats and Remaining Problem Areas

Mr. Olson noted although the new technology has improved the County's dispatch operations, it has increased the need to have two dispatchers present at all times. One dispatcher simply cannot keep track of all of the technology, squad tracking systems and mapped information while trying to handle emergency calls.

CONCLUSION

On the whole, consolidating dispatch service has proved to offer many advantages for each of the agencies interviewed. All of the dispatch providers mentioned similar cost savings and improvements in efficiency obtained by consolidating dispatch operations. The costs of equipment, personnel and facility space decrease when redundant systems and operations are eliminated. The presence of all dispatch operators and equipment in the same location allows for cross-training of dispatchers in procedures for police, fire and EMS emergencies and familiarization with all geographic areas served by the consolidated center. This accommodates greater flexibility in scheduling and handling large incidents requiring responses from multiple agencies. The location of all equipment and dispatchers in the same room provides opportunities for more interfacing between computer aided dispatch (CAD), computerized mapping and records systems and improved communication between dispatchers for more coordinated

responses to emergency situations. A consolidated center handles a higher volume of calls and therefore its personnel devote all of their time to dispatch, resulting in greater efficiency. Consolidating dispatch services also creates economies of scale in the purchase of state-of-the-art vehicle tracking equipment and CAD systems.

Some of the same features of a consolidated dispatch that present opportunities for greater efficiency may also present difficulties if not managed properly. For example, the fact that all dispatchers work for one consolidated geographic region requires that all dispatchers be thoroughly trained in the procedures for dispatching different types of squads and that the individual police, fire and rescue departments be willing to work with dispatch operators. A consolidated dispatch center requires a certain level of standardization of dispatch procedures and individual agencies must be willing to work together to establish common procedures. Consolidated dispatch allows for the dispatch of the nearest unit available, which can reduce response time and increase public safety. This can, however, lead to the perception of preferential treatment of one agency over another and hinder the working relationship between agencies and between the dispatchers and emergency personnel. Finally, the advanced technologies for vehicle tracking and CAD systems do not automatically improve dispatch efficiency. Police, fire and rescue personnel and dispatchers must be properly trained on the equipment and willing to use it in order for it to have the desired effect.

Like many other systems, consolidated dispatch will not necessarily produce significant operational efficiencies unless personnel are properly trained and willing to work together. It does, however, provide the organizational structure and opportunities to improve communication and reduce redundant or inefficient effort.

APPENDIX 9

A PROPERTY TAX REVENUE SHARING MODEL FOR EASTERN RACINE COUNTY

A PROPERTY TAX REVENUE SHARING MODEL FOR EASTERN RACINE COUNTY

INTRODUCTION

Some common themes in the literature on city-suburban relations in the last few decades have been the relative inability of central cities to compete for new commercial and manufacturing development, the loss of higher-income households to the suburbs, and the struggle of cities to continue providing services with deteriorating property tax bases. These phenomena are interrelated and the presence of one can lead to the appearance of another, which in turn accelerates the initial cause of decline. While it is difficult to identify the initial cause of decline amongst multiple, interrelated events; its effects can be observed in changes in the fiscal health of central cities compared to their suburbs. One such indicator of the relative strength of a city's tax base and its ability to support a given level of services is its fiscal capacity.

Fiscal capacity for a municipality can be defined in terms of equalized property value per capita. Fiscal capacity determines the level of services per capita that can be provided at a given tax rate. Alternatively, fiscal capacity determines what tax rate is needed to provide a given level of services per capita. If two municipalities provide the same level of services per capita, the municipality with the higher fiscal capacity will have the lower tax rate. In many cases, the fiscal capacity of large cities is low and stagnant or declining, while those of surrounding communities are large and growing, leading to continually increasing disparities in fiscal capacity.

Fiscal capacity disparities result from the uneven distribution of population and economic activity across communities. The reasons why uneven distribution occurs are varied and complex. Generally it is new property development on the fringe of developed areas and the abandonment or deterioration of existing properties in the core developed areas that drive changes in fiscal capacity.

Certain types of development, particularly industrial and business parks, tend to generate property tax revenues that exceed the cost of providing services to these properties. Therefore, communities that are able to attract business and industrial development are receiving a net tax revenue benefit. Favorable types of development increase the municipality's fiscal capacity without adding proportionately to the cost of providing services. This allows municipalities that attract these types of development to offer a given level of services at a lower property tax rate. A major factor in consideration of business location is the cost of operating at a site. Property taxes can vary greatly between communities. All other things considered equal, a business will locate in an area that has lower taxes. Communities with low fiscal capacity must have higher taxes to provide a given level of services. This hinders their ability to attract new commercial and industrial development and increase their fiscal capacity. This results in poorer communities with low fiscal capacity falling further and further behind communities with high fiscal capacity.

Fiscal disparities are also caused, in part, by the uneven distribution of high value residential property. High value residential properties generate higher tax revenues than lower value properties, but usually require no more municipal services than other residential properties. And, like businesses, household location decisions are influenced by property tax rates. Municipalities that are able to attract relatively high-value residential properties will generally be able to maintain a low tax rate and still provide high-quality services compared to communities with concentrations of lower-value residential properties.

In recent years, the City of Racine and its surrounding municipalities have experienced the trends discussed above. This report briefly examines the presence and extent of fiscal disparities in Eastern Racine County and evaluates property tax revenue sharing as a possible means to reduce these disparities.

FISCAL CAPACITY DISPARITIES IN EASTERN RACINE COUNTY

In the past two decades, there has been a shift in population and tax base from the City of Racine to the surrounding municipalities in Eastern Racine County. The suburban communities have attracted new commercial and industrial development and higher value residential development. During this period, the City has not been able to successfully compete with the suburbs for the location of new commercial and industrial development. These changes have resulted in large disparities in fiscal capacity, expressed in terms of equalized value per capita, between the City and the surrounding communities.

In 1998, Racine had the lowest equalized value per capita of all communities in Eastern Racine County (Table 1). The gap between Racine's fiscal capacity and that of other communities in the area ranges from \$20,990 to \$61,529 per capita. Even the poorest of the suburban communities, in terms of equalized value per capita, has a per capita equalized value that was 73% higher than Racine's. During the last eight years the fiscal capacity gap has widened between Racine and all of the surrounding communities (Table 2). For several of the surrounding municipalities, the gap in equalized value per capita has more than doubled. In part as a result of these fiscal capacity disparities, the City has a property tax rate that is two to three times as high as those in the surrounding communities (Table 3).

This disparity in fiscal capacity and the resultant variation in property tax rates is a significant factor in the City's difficulties competing for commercial and manufacturing development in the last decade. The suburbs have attracted new commercial and industrial development at a rapid pace and, in some cases, businesses have relocated from Racine to the suburbs. Between 1990 and 1998, the total equalized value of manufacturing and commercial property in the City of Racine increased by only 27%, while that of most surrounding communities increased by more than 50% (Table 4). Considering general price inflation, Racine has experienced very little growth in manufacturing and commercial property value. The City of Racine also fell behind the suburban communities in terms of manufacturing and commercial equalized value per capita, almost all of the surrounding communities experienced larger increases than did Racine (Table 5). As a result of the City's relative inability to compete with the surrounding communities for manufacturing and commercial development, the area's share of manufacturing and commercial property value located in the City fell from 62% in 1990 to only 50% in 1998 (Table 6).

Not only have the suburbs been more successful at attracting manufacturing and commercial development, they have also attracted high-income residents and higher priced residential development. At the same time, residential property values and household income have remained low in the City of Racine. Between 1990 and 1998, the gap between the equalized value per capita of residential property in the suburbs versus the City of Racine increased for all of the surrounding municipalities (Table 7). In 1990, the median household income for Racine County was \$32,751, while the median household income for City of Racine residents was only \$26,540. As suburbs grow, low-value residential properties and low-income households become concentrated in the central city, which increases the burden on the City to provide more services with less fiscal capacity.

The growth in the suburbs has been facilitated by the fact that the City of Racine has extended water and sewer service to the surrounding area without requiring annexation. Research has shown that there is a positive correlation between economic growth and the availability of infrastructure. The water and wastewater facilities serving the surrounding municipalities were built by the City and designed with excess capacity to accommodate future growth. City of Racine ratepayers have been carrying the capital costs related to excess capacity in the system. The majority of growth in the area has been in the suburban communities. The availability of

infrastructure and low tax greenfield properties in close proximity to the City has allowed the surrounding communities to attract desirable development which otherwise might have occurred in the City.

In addition to the provision of water and sewer service, the City has provided certain other services to the surrounding area without being adequately compensated by the recipient communities. In separate reports, Ruekert/Mielke has documented inequities in the provision of library, zoo, museum and transit services. These services benefit the surrounding communities and increase their appeal as desirable places for the location of business or residential development. Because the City has provided services without adequate compensation and has carried excess water and wastewater plant capacity, the City has in effect been subsidizing growth in the suburbs. This has contributed to the existing fiscal capacity disparities in the area.

SUMMARY OF EXISTING INTERMUNICIPAL FISCAL EQUALIZATION PROGRAMS INVOLVING TAX BASE SHARING AND TAX REVENUE SHARING

Intermunicipal fiscal equalization programs are attempts to reduce fiscal disparities between neighboring communities. The need and desirability of reducing fiscal disparities among local units of government by redistributing effective local tax base or revenues has been recognized since the early 1950's but few areas have been able to reach the level of cooperation necessary to implement intermunicipal programs. The objectives of tax base sharing and revenue sharing programs are as follows: 1) reduce inequities among communities by equalizing the tax burden required to finance a given level of facilities and services; 2) promote greater efficiency in the location of economic activity.

Tax base sharing and revenue sharing agreements can reduce competition among neighboring communities for the location of certain types of development. Tax base sharing involves allocating some portion of the property tax base of two or more municipalities into a common pool to which tax rates are applied based on an agreed upon formula. The taxes generated are then redistributed to the participating municipalities, based on an agreed upon formula, in order to equalize the fiscal capacities of the participating municipalities. Alternatively, tax revenue sharing programs redistribute the tax revenues generated by two or more municipalities from general property, sales or income tax levies. Since tax base sharing and tax revenue sharing both result in the redistribution of revenues, the term tax revenue sharing is commonly used to refer to either type of program.

Ruekert/Mielke researched fiscal equalization programs involving tax base sharing and tax revenue sharing in various jurisdictions throughout the United States and Canada. This search included a review of the professional and academic literature as well as communication with various agencies and universities including the University of Iowa, University of Missouri, University of Tennessee, University of Manitoba, National League of Cities, League of Wisconsin Municipalities and the Pennsylvania Economy League. The research indicates that tax base sharing and tax revenue sharing fiscal equalization programs are not very common. Tax revenue and tax base sharing programs exist in some form in the following jurisdictions: Minnesota Twin Cities Area, Louisville and Jefferson County, Kentucky, Dayton and Montgomery County, Ohio, Thornton and Westminster, Colorado, Louisville and Superior, Colorado, the Hackensack-Meadowlands, New Jersey, Charlottesville and Albermarle County, Virginia, Allegheny County, Pennsylvania, and McFarland and Madison, Wisconsin. Each of these programs is specifically tailored to the local area's needs, fiscal capacities, and local and state tax structures. The programs vary in complexity and include sharing of revenues from various tax sources including sales taxes, income taxes, occupational licensee fees and property taxes. This report will focus on sharing of property tax revenues only.

The following paragraphs summarize the revenue sharing programs that involve only property taxes.

Minnesota Twin Cities Area

The Minneapolis - St. Paul Fiscal Disparities Program, established under the auspices of the Minnesota Fiscal Disparities Act of 1971 is the largest tax base-sharing program in the nation, covering seven counties and about 300 local governments. Under this program, which uses a 1971 base year, municipalities contribute forty percent of the growth, from the base year, in their commercial and industrial property tax base to a common pool. Each municipality keeps sixty percent of its commercial and industrial tax base growth and its entire residential tax base. A common tax rate is applied to the pooled tax base to determine pooled revenues for redistribution. The distributions from the pool are based upon a formula that includes each municipality's population and the ratio of the average fiscal capacity of all jurisdictions to the municipality's fiscal capacity.

Research indicates that the Minnesota plan may result in property tax revenue redistribution patterns that are inconsistent with the goals of fiscal equalization. These problems result from the following aspects of the plan: 1) contributions are based only upon growth in commercial/industrial values, 2) the distribution formula is based upon the ratio of the average equalized value to a municipality's equalized value 3) all net distributions are required to be positive. The formulas and calculations employed do not adequately consider differences in residential property values when determining distribution amounts. This allows for a wealthy community with no commercial or industrial property value growth to be a net recipient of redistributed revenues and poorer communities with some commercial property growth to be net contributors. For example, in 1975 there were 195 communities participating in the plan. Twenty-five communities with low fiscal capacity were net contributors and forty-seven with high fiscal capacity were net gainers. Of the forty-seven high fiscal capacity communities that were net gainers, twenty-nine had a tax base that was fifty percent higher than the median. This redistribution to wealthy communities is contrary to the goal of fiscal capacity equalization.

Hackensack-Meadowlands, New Jersey

This program involves property tax sharing among 14 municipalities in two New Jersey counties of the New York SMSA to manage development in a region that contains a special district (Hackensack Meadowlands) with important wetlands. Jersey City is the one central city from among the 14 municipalities. The program, which dates from 1970, is operated by the Hackensack Meadowlands Development Commission. Since the Commission has responsibility for land development and wetlands reclamation in the district, the tax bases of the 14 municipalities are differentially affected by the Commission's land use decisions. The goal is for each municipality to receive a fair share of the property taxes generated by new development regardless of where it occurs to lessen competition for taxable development. The contribution plan uses a 1970 base year and divides revenues from development in the district that occurred after that year. A shared pool consists of a revenue base equal to the growth in the cities' total property tax revenue less the amounts owed to the Counties for property taxes. The funds from the pool are then reallocated to the cities so that that each city retains 60 percent of its revenue growth within the district. Residual distributions are based on the proportion of the district's land located within the city. The relationship between a city's revenue growth and the amount of its land within the district determines whether it is a net contributor or net recipient. This program is less a fiscal capacity equalizer than a means of redistributing the growth in tax revenues within a specific geographic area.

Charlottesville and Albermarle County, Virginia

As the Albermarle County suburbs grew through the 1970s, the City of Charlottesville had been considering annexations as a means of regaining tax base to maintain the quality of the public services it provided to the region. An adversarial relationship developed in which the County tried to defeat annexation by proving that it was providing adequate public services to the suburbs. In 1982-1983, the City of Charlottesville and Albermarle County entered into a revenue sharing agreement as an alternative to continued annexations of County lands by the City. Under the terms of the agreement, the City and County share property tax revenues created by economic growth regardless of whether the growth occurs in the City or the County. In exchange for the agreement to share property tax revenues the City agreed to waive its right to annex in perpetuity. Under the agreement, each jurisdiction contributes annually to jointly fund an amount equivalent to the revenue that would be generated by a tax rate of \$0.37 cents per \$100 of assessed valued levied against the assessed value of all its taxable property. Distributions from the revenue sharing fund are made each year to the City and the County based on a formula that gives equal weight to their relative populations and tax effort.

Reportedly, the program has made the County, which no longer fears annexation, less defensive in its planning and capital investment programming. The City now has more funds available for capital improvements and focuses its attention on redevelopment activity. One of the drawbacks of this arrangement, however, is that the contribution and distribution formulas do not take fiscal capacity into account. The use of tax effort in the formula in place of fiscal capacity means that it tends to favor municipalities with higher tax rates and take from municipalities with lower tax rates, regardless of their fiscal capacity. This may result in a municipality with a high fiscal capacity and a relatively high tax rate benefiting more from the program than a municipality with low fiscal capacity.

McFarland and Madison, Wisconsin

The State of Wisconsin permits municipalities to enter into revenue sharing agreements, but to date the only known agreement is between the Cities of McFarland and Madison. The agreement was essentially designed to rationalize the mutual municipal boundaries. In terms of both the amount of revenue exchanged and the length of the agreement, it is a very small agreement. Under the terms of the agreement, the City of Madison detached some of its land, which was then attached to the City of McFarland. In return, the two cities agreed to share the property tax revenues generated by the disconnected lands. The agreement runs for a term of 10 years and specifies that McFarland shall pay Madison a total of \$55,000 over the 10-year period. Thus far, there are no major, long-term intermunicipal property tax revenue sharing agreements in place in Wisconsin.

A PROPOSED PROPERTY TAX REVENUE SHARING MODEL FOR EASTERN RACINE COUNTY

A property tax revenue sharing program for Eastern Racine County should have the following objectives: 1. Sharing of commercial and industrial tax base; 2. Transfers of revenues generally from high fiscal capacity communities to low fiscal capacity communities, abating inequities in fiscal capacity; 3. Reduction of disparities in tax rates; 4. Reduction of competition between neighboring communities for certain types of economic activity; 5. Reduction of annexation disputes; 6. Affect only local tax rates and not the levels of services provided.

The formulas used for property tax revenue sharing programs from Minnesota and other jurisdictions may not be appropriate for the Racine area since it has been demonstrated that the existing models can produce revenue distribution patterns that are inconsistent with the stated objectives. However, the review of other plans and the academic literature offer lessons that can

be reflected and ideas that can be incorporated into developing a workable plan for eastern Racine County.

The model proposed for eastern Racine County incorporates the following concepts: 1. Contributions should be based on total commercial and industrial property values rather than increases in commercial and industrial property values. 2. The plan should be self-financing and net distributions should sum to zero. 3. Distributions should not be guaranteed to be positive. 4. The distribution formula should be based upon the difference between a municipality's fiscal capacity and the base fiscal capacity rather than a ratio of the two.

The model works as follows:

- 1. The information needed to calculate each municipality's contribution and distribution includes population, the local property tax rate per \$1,000 of equalized value, total equalized value, commercial and industrial equalized value, the sum of all other equalized property value (household tax base), and the budgeted tax revenues. Table 8 provides this information for three hypothetical communities.
- 2. The first step is to compute the value of the tax base to be contributed to the common pool by each municipality. Each municipality contributes an agreed-upon percentage of its total commercial and industrial equalized property value. The theory is that some portion of the tax revenues from these types of property exceeds the cost of providing services to the properties and therefore represents a net benefit that may be shared with other communities. In this example, the contribution share is 40%. This provides a pool of \$164,000,000 of tax base to be shared among the municipalities, as shown in Table 9.
- 3. The next step is to determine how the shared base will be redistributed back to the municipalities in the pool. Each municipality's distribution is based on a distribution factor times the difference between a guaranteed household tax base and the municipality's actual household tax base. The distribution factor is a percentage determined by agreement. The larger the distribution factor, the more tax revenue will be redistributed by the formula. A factor of 20% is used for this example. The guaranteed household tax base per capita is set at a level that ensures that the revenue distributions will sum to zero. The guaranteed tax base per capita times the municipality's population determines the guaranteed tax base for each municipality. The actual household tax base is subtracted from the guaranteed tax base and multiplied by the distribution factor. As shown in the sample computations in Table 10, if a municipality's household tax base is higher than the guaranteed tax base, the municipality's distribution tax base will be negative.
- 4. The net result of the tax base contributions and distributions is a new effective local tax base for each municipality. If a municipality's budgeted revenues are to remain the same, this means that the municipality must either lower or raise its local property tax rate. The third step is to calculate this new effective local tax rate. As shown in Table 11, the effective local tax base is the original total equalized property value less the tax base contribution, plus the tax base distribution. The budgeted tax revenues are then divided by the effective local tax base to determine the effective local tax rate. If the municipality is a net contributor, the tax rate increases. If it is a net recipient, the tax rate decreases.
- 5. The final step, displayed in Table 12, is to calculate the net revenue transfers that will be made as a result of the tax base sharing. Each municipality collects taxes for all the property within its jurisdiction at the new effective local tax rate, but contributes or receives revenue from the pool so that its budgeted revenues remain the same as they

would be without the revenue sharing program. The amount of the revenue contribution or distribution is the municipality's effective local tax rate times its net tax base transfer. If the municipality is a net contributor of tax base, it will also be a net contributor of revenue, and vice versa. The sum of the revenue transfers for all municipalities will equal zero.

6. Table 13 summarizes the net results for each of the municipalities in the sample computations. Municipalities A and B are net contributors of tax revenue, contributing \$470,833 and \$122,035, respectively. Municipality C, which has a significantly lower fiscal capacity than the other two municipalities, receives the entire revenue transfer of \$592,868. This enables Municipality C to lower its property tax rate from \$10.00 to \$9.21 and still collect the same total revenues. Municipality A must raise its tax rate from \$5.00 to \$5.59, and Municipality B raises its tax rate from \$7.50 to \$8.22. These revenue transfers also have a modest equalizing effect on the relative fiscal capacities of the three municipalities. The fiscal capacity of each municipality with revenue sharing is equivalent to the new effective local tax base divided by the population. With revenue sharing, the fiscal capacity of Municipality A decreases from \$80 to \$71.58, and the fiscal capacity of Municipality B from \$85 to \$77.58. Municipality C has a slight increase in fiscal capacity, from \$30 to \$32.58.

Based on the sample computations, the model appears to produce revenue distributions in the desired directions. In order to examine the feasibility of using the plan for eastern Racine County, three models were run using 1998 population, tax levies and equalized values. It was assumed that seven municipalities that are currently served by Racine's Wastewater Treatment Facility would participate in the revenue sharing program.

Three alternative formulas were run using different combinations of contribution and distribution factors. The first included contributions of 40% of a community's industrial and commercial tax base and a 20% distribution factor. The second alternative used 50% of a community's industrial and commercial tax base and a 20% distribution factor. The third alternative included 50% of a community's industrial and commercial tax base and a 15% distribution factor. The results are summarized in Table 14 with the calculations for the three alternative models presented in Tables 15 through 18. Tables 14-17 present the results of the model excluding the Towns of Yorkville and Raymond, and Table 18 presents Option 1 including Yorkville and Raymond.

Upon a review of the revenue distributions resulting from the alternative formulas, the following conclusions can be drawn about the proposed model:

- The model produces results generally consistent with the objectives stated above
- The magnitude of the net revenue transfer from each municipality will change as adjustments are made in the industrial and commercial contribution share factor and the distribution factor. It should be noted that, depending on the factors selected, this formula would be capable of a high degree of equalization.
- If the industrial and commercial contribution share factor is increased while holding the distribution factor constant, then communities with high per capita industrial and commercial property values will pay more (or receive less) and communities with lower per capita industrial and commercial values will pay less (or receive more).
- Likewise, if the industrial and commercial contribution share factor is lowered then communities with high per capita industrial and commercial property values will pay less (or receive more) and communities with lower per capita industrial and commercial values will pay more (or receive less).

- Likewise, if the distribution factor is increased then communities with high per capita equalized property values will pay more (or receive less) and poorer ones will pay less (or receive more).
- Lowering the contribution and distribution factors can decrease the overall amount of funds being distributed.

In addition to the eastern Racine County proposed tax sharing model, a pure equalization model was developed that bases each municipality's contribution and distribution on total equalized value rather than factors for commercial/industrial and residential values. The model works as follows:

- 1. A guaranteed tax base is calculated by taking each municipality's population times a guaranteed base equalized value per capita. The base equalized value per capita is a solved number that ensures that the sum of the net revenue transfers is zero.
- 2. Rather than calculating each municipality's contribution and distribution separately, a net distribution is calculated for each municipality in one step. This is done by taking the guaranteed tax base minus the municipality's actual total equalized value. The result of this calculation is multiplied by an agreed-upon percentage known as the distribution factor. If a municipality has equalized value higher than the guaranteed tax base, it will be a net contributor of tax base. If its equalized value is lower than the guaranteed tax base, it will receive a positive net tax base distribution.
- 3. Each municipality's new effective local tax rate is calculated based on the net tax base distribution. The effective local tax base is calculated by taking the total equalized value plus the net tax base distribution. The budgeted local revenues are divided by the effective local tax base to calculate the new effective local tax rate.
- 4. Each municipality's net revenue transfer is calculated as the net tax base distribution times the effective local tax rate. If the tax base distribution is negative, the municipality will contribute revenue to the pool. If the tax base distribution is positive, the municipality will be a net recipient of revenues. The sum of all revenue transfers will be zero.

After running this model with several different scenarios and comparing it to the proposed tax sharing model, several conclusions can be drawn.

- 1. The distribution factor in this model represents the degree of fiscal equalization that will be achieved by the revenue transfers produced. The degree of fiscal equalization achieved is measured by the percentage reduction in the standard deviation of the municipalities' fiscal capacities before and after revenue sharing. This means that this model is capable of achieving complete fiscal equalization if a distribution factor of 100% is used. Using the 1998 data for the Racine area, 100% equalization would require transfers of \$9.1 million to the City of Racine.
- 2. This model always achieves the same degree of fiscal capacity equalization at a given distribution factor regardless of the relative differences in the original equalized value per capita of participating municipalities and regardless of the distribution of equalized value between commercial/industrial and residential property. This is not true of the proposed tax sharing model, where a municipality with high commercial/industrial equalized value may be a net contributor in spite of very low total equalized value per capita.

Tests were conducted of the ability of each model to reduce competition for new commercial/industrial development. With the 40% industrial and commercial tax base contribution factor, and a 20% distribution factor formula favored by the Racine area communities, most municipalities would be able to "keep" 60-70% of the equalized value of new commercial/industrial development locating within their jurisdiction. The alternative model achieves approximately the same overall level of revenue transfers with a 20% distribution factor. At this level of equalization, most municipalities would "keep" approximately 80% of any new commercial/industrial development. Therefore, the proposed eastern Racine County model is more likely to reduce competition between area communities, for the location of commercial and industrial development at the same level of transfers. The alternative model would need to have a distribution factor of 40% to reduce competition for commercial/industrial development to the same level as the eastern Racine County proposed model. A 40% distribution factor for the alternative model would generate revenue transfers of approximately \$3.24 million to the City of Racine which would be nearly double that of the proposed model.

CONCLUSION

It is recommended that the proposed model (40% commercial tax base contribution and a 20% distribution factor) be utilized rather than the alternative pure equalization model when considering tax base sharing. While both models can be constructed to obtain similar results, the proposed model has potential for use as a means of sharing commercial and industrial tax base and a way to equalize fiscal capacity (see Table 14 Option 1). The model can achieve net distribution results that are consistent with the objectives and may lessen competition between communities for attracting certain types of development. This could result in improved intergovernmental cooperation in the area. The model has flexibility to adjust the overall net distribution levels as well as the weighting of commercial and industrial tax base and the household tax base in computation of the net revenue distributions.

In order to implement a revenue sharing plan, participating municipalities will need to meet and determine what contribution and distribution factors are to be used in the revenue sharing formula. After negotiation and agreement on a final formula, policies and procedures for implementation of the plan can be established.

Table 1
Eastern Racine County
Fiscal Capacity in Terms of Per Capita Equalized Property Values, 1998

				Can in Favolinad
	Total Equalized		Faualized Value	Gap in Equalized Value per Capita
Municipality	Value ⁽¹⁾	Population (2)	per Capita	Dollars
V. North Bay	\$22,390,200			\$61,529
V. Wind Point	171,348,200	1,904	89,994	61,240
T. Yorkville	231,288,000	3,047	75,907	47,153
T. Raymond	225,155,000	3,348	67,251	38,496
T. Mt. Pleasant	1,340,313,000	22,248	60,244	31,490
V. Elmwood Park	30,039,600	524	57,327	28,573
T. Caledonia	1,126,897,800	22,654	49,744	20,990
V. Sturtevant (3)	199,790,800	3,875	51,559	22,805
C. Racine	2,459,986,100	85,552	28,754	1

Notes:

- 1. Wisconsin Department of Revenue 1998 equalized values.
- 2. Wisconsin Department of Administration 1998 population estimates.
- 3. Sturtevant excludes prison population.

Table 2
Eastern Racine County Municipalities
Gap in Equalized Value per Capita, 1990 and 1998

	Excess Equalized	Excess Equalized Value per Capita, Compared to Racine					
			Percent Change				
Municipality	1990	1998	1990-1998				
T. Caledonia	\$9,855	\$20,990	113%				
T. Mount Pleasant	18,081	31,490	74				
T. Raymond	17,332	38,496	122				
T. Yorkville	18,498	47,153	155				
V. Elmwood Park	22,820	28,573	25				
V. North Bay	55,919	61,529	10				
V. Sturtevant	9,485	22,805	140				
V. Wind Point	54,809	61,240	12				
C. Racine	-	-	-				

Table 3
Eastern Racine County Municipalities
Municipal Property Tax Rates

	Property Tax
Municipality	Rate / \$1,000 (1)
V. Elmwood Park	\$4.41
T. Mt. Pleasant	7.06
V. Sturtevant	5.11
T. Caledonia	6.60
V. Wind Point	6.10
T. Raymond	2.53
T. Yorkville	2.36
V. North Bay	8.87
C. Racine	13.92

1. 1998 municipal full value tax rates (gross - before state property tax credit). Source: Wisconsin DOR (total reported tax levy divided by full value).

Table 4
Eastern Racine County Municipalities
Growth In Manufacturing and Commercial Equalized Value, 1990-1998

	Total Manufacturing / Commercial Equalized Value					
		Change,		Percent Change		
Municipality	1990 Dollars	1998 Dollars	1990-1998	1990-1998		
T. Caledonia	\$78,378,000	\$119,968,100	\$41,590,100	53%		
T. Mount Pleasant	167,148,800	318,261,900	151,113,100	90		
T. Raymond	12,868,100	35,829,700	22,961,600	178		
T. Yorkville	18,401,400	60,441,100	42,039,700	228		
V. Elmwood Park	1,435,500	1,421,400	-14,100	-1		
V. North Bay	-	-	-	-		
V. Sturtevant	28,805,500	90,422,400	61,616,900	214		
V. Wind Point	6,539,800	8,405,300	1,865,500	29		
C. Racine	503,415,600	637,435,300	134,019,700	27		
Total	\$816,992,700	\$1,272,185,200	\$455,192,500	56%		

Table 5
Eastern Racine County Municipalities
Change in Manufacturing and Commercial Equalized Value per Capita, 1990-1998

	Manufacturing and Commercial Equalities Value non Conite					
	ivianutacturing and	Manufacturing and Commercial Equalized Value per Capita				
			Change, 1990-1998			
Municipality	1990 Dollars	1998 Dollars	Dollars			
T. Caledonia	\$3,732	\$5,296	\$1,563			
T. Mount Pleasant	8,322	14,305	5,983			
T. Raymond	3,968	10,702	6,734			
T. Yorkville	6,343	19,836	13,493			
V. Elmwood Park	2,688	2,713	24			
V. North Bay	-	-	-			
V. Sturtevant	10,277	23,335	13,058			
V. Wind Point	3,369	4,415	1,045			
C. Racine	5,972	7,451	1,479			

Table 6
Eastern Racine County Municipalities
Change in Share of Manufacturing and Commercial Equalized Value, 1990-1998

	Total	Total Manufacturing / Commercial Equalized Value					
		Percent of Area		Percent of Area			
Municipality	1990 Dollars	Total	1998 Dollars	Total			
T. Caledonia	\$78,378,000	9.59%	\$119,968,100	9.43%			
T. Mount Pleasant	167,148,800	20.46	318,261,900	25.02			
T. Raymond	12,868,100	1.58	35,829,700	2.82			
T. Yorkville	18,401,400	2.25	60,441,100	4.75			
V. Elmwood Park	1,435,500	0.18	1,421,400	0.11			
V. North Bay	-	-	-	-			
V. Sturtevant	28,805,500	3.53	90,422,400	7.11			
V. Wind Point	6,539,800	0.80	8,405,300	0.66			
C. Racine	503,415,600	61.62	637,435,300	50.11			
Total	\$816,992,700	100.00%	\$1,272,185,200	100.00%			

Table 7
Eastern Racine County Municipalities
Change in Residential Equalized Value per Capita, 1990-1998

	Residential Equalized Value per Capita							
		In Excess of		In Excess of	Percent Change in			
		Racine 1990		Racine 1998	EV Gap, 1990-			
Municipality	1990 Dollars	Dollars	1998 Dollars	Dollars	1998			
T. Caledonia	\$24,568	\$11,421	\$41,413	\$21,678	90%			
T. Mount Pleasant	26,284	13,138	40,807	21,072	60			
T. Raymond	23,023	9,876	40,304	20,569	108			
T. Yorkville	19,593	6,446	39,442	19,707	206			
V. Elmwood Park	39,956	26,809	53,731	33,997	27			
V. North Bay	76,691	63,545	90,243	70,508	11			
V. Sturtevant	18,430	5,283	25,401	5,666	7			
V. Wind Point	71,040	57,894	84,145	64,411	11			
C. Racine	13,147	-	19,735	-	-			

Table 8
Eastern Racine County Tax Base Sharing Model
Sample Computations--Municipal Data

	A	В	С	Total
Population	10,000	2,000	25,000	37,000
Property Tax Rate (/ \$1,000 EV)	\$5.00	\$7.50	\$10.00	\$7.43
Equalized Value (000's)	\$800,000	\$170,000	\$750,000	\$1,720,000
E.V. per capita (000's)	\$80.00	\$85.00	\$30.00	\$46.49
Commercial / Industrial Tax Base (000's)	\$150,000	\$10,000	\$250,000	\$410,000
Household Tax Base (000's)	\$650,000	\$160,000	\$500,000	\$1,310,000
Budgeted Tax Revenues (000's)	\$4,000	\$1,275	\$7,500	\$12,775

Table 9
Eastern Racine County Tax Base Sharing Model
Sample Computations--Calculation of Municipality Base Contribution

Contribution = (Share of Comm / Industrial Tax Base) x (Comm / Industrial Tax Base)

	А	В	С	Total
Share of Commercial / Industrial Tax Base	40%	40%	40%	40%
Commercial / Industrial Tax Base	\$150,000	\$10,000	\$250,000	\$410,000
Contribution Toward Area Wide Tax Base (000's)	\$60,000	\$4,000	\$100,000	\$164,000

Table 10
Eastern Racine County Tax Base Sharing Model
Sample Computations--Calculation of Municipality Base Distribution

Distribution = Distribution Factor x [(Guaranteed Tax Base) - (Household Tax Base)]

Guaranteed Tax Base = (Guaranteed EV per Capita) x Population

	Α	В	С	Total
Guaranteed Base E.V. per capita (000's) *	52.88	52.88	52.88	52.88
Guaranteed Tax Base	\$528,751	\$105,750	\$1,321,878	\$1,956,380
Distribution Factor	20%	20%	20%	20%
Distribution Base	-\$24,250	-\$10,850	\$164,376	\$129,276

^{*} Guaranteed Base EV per Capita is solved so that that net revenue distributions sum to zero

Table 11
Eastern Racine County Tax Base Sharing Model
Sample Computations--Determine Effective Local Tax Rate

Effective Local Tax Rate = (Budgeted Revenues * 1000) / (Local Effective Tax Base)

	Α	В	С
Equalized Value	\$800,000	\$170,000	\$750,000
Less: Contribution Base Value	-\$60,000	-\$4,000	-\$100,000
Plus Net Distribution Base Value	-\$24,250	-\$10,850	\$164,376
Local Effective Tax Base	\$715,750	\$155,150	\$814,376
Budget Tax Revenues (000's)	\$4,000	\$1,275	\$7,500
Effective Local Tax Rate (with revenue sharing)	\$5.59	\$8.22	\$9.21
Budget Tax Revenues (000's)	\$4,000	\$1,275	\$7,500
Net Transfer (000's)	-\$471	-\$122	\$593
Adjusted Revenues	\$4,471	\$1,397	\$6,907
Tax Rate	\$5.59	\$8.22	\$9.21

Table 12
Eastern Racine County Tax Base Sharing Model
Sample Computations--Calculation of Net Revenue Transfer

Net Revenue Transfer = Net Base Transfer x Local Effective Tax Rate

	Α	В	С	Total
Distribution Base	-\$24,250	-\$10,850	\$164,376	\$129,276
Contribution Base	-\$60,000	-\$4,000	-\$100,000	-\$164,000
Net Base Transfer (000's)	-\$84,250	-\$14,850	\$64,376	-\$34,724
Effective Local Tax Rate	\$5.59	\$8.22	\$9.21	
Net Revenue Transfer	-\$470,833	-\$122,035	\$592,868	\$0

Table 13
Eastern Racine County Tax Base Sharing Model
Sample Computations--Community Impacts

	Α	В	С
Net Distribution	-\$470,833	-\$122,035	\$592,868
Tax Rate Before Revenue Sharing Tax Rate With Revenue Sharing	\$5.00 \$5.59	\$7.50 \$8.22	\$10.00 \$9.21
Per Capita Spending	\$400.00	\$637.50	\$300.00
E.V. per Capita Before Revenue Sharing (000's) E.V. per Capita With Revenue Sharing (000's)	\$80.00 \$71.58	\$85.00 \$77.58	\$30.00 \$32.58

Table 14
Proposed Tax Base Sharing Model
Comparison of Alternative Revenue Sharing Formulas
Eastern Racine County Municipalities (1)

T. Caledonia	T. Mt. Pleasant	V. North Bay	V. Sturtevant	V. Wind Point	C. Racine	Total
on Factor)						
-\$350,583 \$6.60 \$6.91	-\$1,074,141 \$7.06 \$7.86	-\$22,766 \$8.87 \$9.88	-\$139,692 \$5.11 \$5.80	-\$132,308 \$6.10 \$6.87	\$1,727,425 \$13.92 \$13.22	\$0
on Factor)						
-\$300,600 \$6.60 \$6.87	-\$1,191,235 \$7.06 \$7.95	-\$20,505 \$8.87 \$9.78	-\$179,299 \$5.11 \$6.00	-\$126,523 \$6.10 \$6.84	\$1,824,646 \$13.92 \$13.18	\$0
on Factor) -\$169,397 \$6.60 \$6.75	-\$1,015,248 \$7.06 \$7.82	-\$12,471 \$8.87 \$9.42	-\$178,944 \$5.11 \$6.00	-\$85,936 \$6.10 \$6.60	\$1,465,174 \$13.92 \$13.33	\$0
	on Factor) -\$350,583 \$6.60 \$6.91 on Factor) -\$300,600 \$6.60 \$6.87 on Factor) -\$169,397 \$6.60	on Factor) -\$350,583	on Factor) -\$350,583	on Factor) -\$350,583	on Factor) -\$350,583 -\$1,074,141 -\$22,766 -\$139,692 -\$132,308	on Factor) -\$350,583 -\$1,074,141 -\$22,766 -\$139,692 -\$132,308 \$1,727,425 \$6.60 \$7.06 \$8.87 \$5.11 \$6.10 \$13.92 \$6.91 \$7.86 \$9.88 \$5.80 \$6.87 \$13.22 on Factor) -\$300,600 -\$1,191,235 -\$20,505 -\$179,299 -\$126,523 \$1,824,646 \$6.60 \$7.06 \$8.87 \$5.11 \$6.10 \$13.92 \$6.87 \$7.95 \$9.78 \$6.00 \$6.84 \$13.18 on Factor) -\$169,397 -\$1,015,248 -\$12,471 -\$178,944 -\$85,936 \$1,465,174 \$6.60 \$7.06 \$8.87 \$5.11 \$6.10 \$13.92

Table 15
Proposed Tax Base Sharing Model
Option 1 Using Total Commercial / Industrial Values, 40% Commercial Base Factor and 20% Distribution Factor
Eastern Racine County Municipalities, 1998 (1)

1. Municipal Data		T. Caledonia	T. Mt. Pleasant	V. Elmwood Park	V. North Bay	V. Sturtevant	V. Wind Point	C. Racine	Total
Population	P_j	22,654	22,248	524	248	3,875	1,904	85,552	137,005
Tax Rate	R_j	\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	\$10.01
Equalized Value (000's)	B_j	\$1,126,898	\$1,340,313	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,350,766
E.V. per capita (000's)	B_j/P_j	\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	\$39.06
Guaranteed Base E.V. per capita (000's) (solved)	\mathbf{B}_{j}/P_{j}	\$43.84	\$43.84	\$43.84	\$43.84	\$43.84	\$43.84	\$43.84	\$43.84
Commercial/Industrial Tax Base (000's)	l _j	\$119,868	\$318,262	\$1,421	\$0	\$90,422	\$8,405	\$637,435	\$1,175,814
Household Tax Base (000's)	H _j	\$1,007,030	\$1,022,051	\$28,618	\$22,390	\$109,368	\$162,943	\$1,822,551	\$4,174,951
Budget Tax Revenues	REV_j	\$7,439,848	\$9,462,640	\$132,498	\$198,524	\$1,020,054	\$1,045,053	\$34,246,500	\$53,545,117
Guaranteed Tax Base (000's)	\mathbf{B}_{j}	\$993,204	\$975,404	\$22,973	\$10,873	\$169,889	\$83,476	\$3,750,798	\$6,006,617
2. Calculation of Municipality Base Contribution									
Share Commercial / Industrial	a	40%	40%	40%	40%	40%	40%	40%	40%
Contribution Toward Area Wide Tax Base (000's)	a*l _j	\$47,947	\$127,305	\$569	\$0	\$36,169	\$3,362	\$254,974	\$470,326
3. Calculation of Municipality Base Distribution									
Distribution Factor	b	20%	20%	20%	20%	20%	20%	20%	20%
Distribution Base (000's)	b(B _j - H _j)	-\$2,765	-\$9,329	-\$1,129	-\$2,303	\$12,104	-\$15,893	\$385,649	\$366,333
4. Calculation of Net Revenue Transfer			_						_
Net Base Transfer	b(B _j - H _j) -a*I _j	-\$50,712	-\$136,634	-\$1,698	-\$2,303	-\$24,065	-\$19,256	\$130,675	-\$103,993
Net Revenue Transfer	$\mathbf{R}_{j}^{\star} * (\mathbf{b}(\mathbf{B}_{j} - \mathbf{H}_{j}) - \mathbf{a} * \mathbf{I}_{j})$	-\$350,583	-\$1,074,141	-\$7,936	-\$22,766	-\$139,692	-\$132,308	\$1,727,425	\$0
5. Determine Local Tax Rate		0. 100 000		*	*	A.00 70.	0.7.0.0	00 450 000	45.050.700
Equalized Value Less: Contribution Base Value		\$1,126,898 -\$47,947	\$1,340,313 -\$127,305	\$30,040 -\$569	\$22,390 \$0	\$199,791 -\$36,169	\$171,348 -\$3,362	\$2,459,986 -\$254,974	\$5,350,766 -\$470,326
Plus Net Distribution Base Value		-\$47,947 -\$2,765	-\$9,329	-\$1,129	-\$2,303	\$12,104	-\$15,893	\$385,649	\$366,333
Local Effective Tax Base		\$1,076,185	\$1,203,679	\$28,342	\$20,087	\$175,726	\$152,093	\$2,590,661	\$5,246,773
Budget Tax Revenues (000's)		\$7,440	\$9,463	\$132	\$199	\$1,020	\$1,045	\$34,247	\$53,545
Effective Local Tax Rate (with revenue sharing)	R_{j}	\$6.91	\$7.86	\$4.67	\$9.88	\$5.80	\$6.87	\$13.22	
6. Community Impacts									
Net Distribution		-\$350,583	-\$1,074,141	-\$7,936	-\$22,766	-\$139,692	-\$132,308	\$1,727,425	\$0
Tax Rate Before Revenue Sharing		\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	
Tax Rate With Revenue Sharing		\$6.91	\$7.86	\$4.67	\$9.88	\$5.80	\$6.87	\$13.22	
Per Capita Spending		\$328.41	\$425.33	\$252.86	\$800.50	\$263.24	\$548.87	\$400.30	
E.V. per capita (before) (000's)		\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	
E.V. per capita (with revenue sharing)(000's)		\$47.51	\$54.10	\$54.09	\$80.99	\$45.35	\$79.88	\$30.28	

^{1.} Excluding the Town of Raymond and the Town of Yorkville.

Table 16
Proposed Tax Base Sharing Model
Option 2 Using Total Commercial / Industrial Values, 50% Commercial Base Factor and 20% Distribution Factor
Eastern Racine County Municipalities, 1998 (1)

1. Municipal Data		T. Caledonia	T. Mt. Pleasant	V. Elmwood Park	V. North Bay	V. Sturtevant	V. Wind Point	C. Racine	Total
Population	P_j	22,654	22,248	524	248	3,875	1,904	85,552	137,005
Tax Rate	R_j	\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	\$10.01
Equalized Value (000's)	B _j	\$1,126,898	\$1,340,313	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,350,766
E.V. per capita (000's)	B_j/P_j	\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	\$39.06
Guaranteed Base E.V. per capita (000's) (solved)	Bj/P _j	\$48.02	\$48.02	\$48.02	\$48.02	\$48.02	\$48.02	\$48.02	\$48.02
Commercial / Industrial Tax Base (000's)	l _j	\$119,868	\$318,262	\$1,421	\$0	\$90,422	\$8,405	\$637,435	\$1,175,814
Household Tax Base (000's)	H _j	\$1,007,030	\$1,022,051	\$28,618	\$22,390	\$109,368	\$162,943	\$1,822,551	\$4,174,951
Budget Tax Revenues	REV	\$7,439,848	\$9,462,640	\$132,498	\$198,524	\$1,020,054	\$1,045,053	\$34,246,500	\$53,545,117
Guaranteed Tax Base (000's)	\mathbf{B}_{j}	\$1,087,885	\$1,068,388	\$25,163	\$11,909	\$186,084	\$91,433	\$4,108,358	\$6,579,222
2. Calculation of Municipality Base Contribution									
Share Commercial / Industrial	a	50%	50%	50%	50%	50%	50%	50%	50%
Contribution Toward Area Wide Tax Base (000's)	a*l _j	\$59,934	\$159,131	\$711	\$0	\$45,211	\$4,203	\$318,718	\$587,907
3. Calculation of Municipality Base Distribution									
Distribution Factor	b	20%	20%	20%	20%	20%	20%	20%	20%
Distribution Base (000's)	b(B _j - H _j)	\$16,171	\$9,267	-\$691	-\$2,096	\$15,343	-\$14,302	\$457,161	\$480,854
4. Calculation of Net Revenue Transfer									
Net Base Transfer	b(B _j - H _j) -a*I _j	-\$43,763	-\$149,864	-\$1,402	-\$2,096	-\$29,868	-\$18,505	\$138,444	-\$107,053
Net Revenue Transfer	$\mathbf{R}_{j}^{\star} \star (\mathbf{b}(\mathbf{B}_{j} - \mathbf{H}_{j}) - \mathbf{a} \star \mathbf{I}_{j})$	-\$300,600	-\$1,191,235	-\$6,485	-\$20,505	-\$179,299	-\$126,523	\$1,824,646	\$0
5. Determine Local Tax Rate									
Equalized Value		\$1,126,898	\$1,340,313	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,350,766
Less: Contribution Base Value Plus Net Distribution Base Value		-\$59,934	-\$159,131	-\$711	\$0 \$2,000	-\$45,211	-\$4,203	-\$318,718	-\$587,907
Local Effective Tax Base		\$16,171 \$1,083,135	\$9,267 \$1,190,449	-\$691 \$28,638	-\$2,096 \$20,294	\$15,343 \$169,923	-\$14,302 \$152,844	\$457,161 \$2,598,430	\$480,854 \$5,243,713
Budget Tax Revenues (000's)		\$7,440	\$9,463	\$132	\$199	\$1,020	\$1,045	\$34,247	\$53,545
Effective Local Tax Rate (with revenue sharing)	$\mathbf{R}_{\mathbf{j}}^{'}$	\$6.87	\$7.95	\$4.63	\$9.78	\$6.00	\$6.84	\$13.18	
6. Community Impacts									
Net Distribution		-\$300,600	-\$1,191,235	-\$6,485	-\$20,505	-\$179,299	-\$126,523	\$1,824,646	\$0
Tax Rate Before Revenue Sharing		\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	
Tax Rate With Revenue Sharing		\$6.87	\$7.95	\$4.63	\$9.78	\$6.00	\$6.84	\$13.18	
Per Capita Spending		\$328.41	\$425.33	\$252.86	\$800.50	\$263.24	\$548.87	\$400.30	
E.V. per capita (before) (000's)		\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	
E.V. per capita (with revenue sharing)(000's)		\$47.81	\$53.51	\$54.65	\$81.83	\$43.85	\$80.28	\$30.37	

^{1.} Excluding the Town of Raymond and the Town of Yorkville.

Table 17
Proposed Tax Base Sharing Model
Option 3 Using Total Commercial / Industrial Values, 50% Commercial Base Factor and 15% Distribution Factor
Eastern Racine County Municipalities, 1998 (1)

1. Municipal Data		T. Caledonia	T. Mt. Pleasant	V. Elmwood Park	V. North Bay	V. Sturtevant	V. Wind Point	C. Racine	Total
Population	P_j	22,654	22,248	524	248	3,875	1,904	85,552	137,005
Tax Rate	R_j	\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	\$10.01
Equalized Value (000's)	B_j	\$1,126,898	\$1,340,313	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,350,766
E.V. per capita (000's)	B_j/P_j	\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	\$39.06
Guaranteed Base E.V. per capita (000's) (solved)	B j/P _j	\$54.71	\$54.71	\$54.71	\$54.71	\$54.71	\$54.71	\$54.71	\$54.71
Commercial/Industrial Tax Base (000's)	l _j	\$119,868	\$318,262	\$1,421	\$0	\$90,422	\$8,405	\$637,435	\$1,175,814
Household Tax Base (000's)	H _j	\$1,007,030	\$1,022,051	\$28,618	\$22,390	\$109,368	\$162,943	\$1,822,551	\$4,174,951
Budget Tax Revenues	REV_j	\$7,439,848	\$9,462,640	\$132,498	\$198,524	\$1,020,054	\$1,045,053	\$34,246,500	\$53,545,117
Guaranteed Tax Base (000's)	\mathbf{B}_{j}	\$1,239,344	\$1,217,132	\$28,667	\$13,567	\$211,992	\$104,163	\$4,680,335	\$7,495,200
2. Calculation of Municipality Base Contribution									
Share Commercial / Industrial	a	50%	50%	50%	50%	50%	50%	50%	50%
Contribution Toward Area Wide Tax Base (000's)	a*l _j	\$59,934	\$159,131	\$711	\$0	\$45,211	\$4,203	\$318,718	\$587,907
3. Calculation of Municipality Base Distribution									
Distribution Factor	b	15%	15%	15%	15%	15%	15%	15%	15%
Distribution Base (000's)	$b(\mathbf{B}_j - H_j)$	\$34,847	\$29,262	\$7	-\$1,323	\$15,393	-\$8,817	\$428,668	\$498,037
4. Calculation of Net Revenue Transfer									
Net Base Transfer	b(B _j - H _j) -a*I _j	-\$25,087	-\$129,869	-\$703	-\$1,323	-\$29,818	-\$13,020	\$109,950	-\$89,870
Net Revenue Transfer	$\mathbf{R}_{j}^{\star}(\mathbf{b}(\mathbf{B}_{j}-\mathbf{H}_{j})-\mathbf{a}^{\star}\mathbf{I}_{j})$	-\$169,397	-\$1,015,248	-\$3,177	-\$12,471	-\$178,944	-\$85,936	\$1,465,174	\$0
5. Determine Local Tax Rate									
Equalized Value		\$1,126,898	\$1,340,313	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,350,766
Less: Contribution Base Value Plus Net Distribution Base Value		-\$59,934 \$34,847	-\$159,131 \$29,262	-\$711 \$7	\$0 -\$1,323	-\$45,211 \$15,393	-\$4,203 -\$8,817	-\$318,718 \$428,668	-\$587,907 \$498,037
Local Effective Tax Base		\$1,101,811	\$1,210,444	\$29,336	\$21,067	\$169,973	\$158,329	\$2,569,936	\$5,260,896
Budget Tax Revenues (000's)		\$7,440	\$9,463	\$132	\$199	\$1,020	\$1,045	\$34,247	\$53,545
Effective Local Tax Rate (with revenue sharing)		\$6.75	\$7.82	\$4.52	\$9.42	\$6.00	\$6.60	\$13.33	
6. Community Impacts									
Net Distribution		-\$169,397	-\$1,015,248	-\$3,177	-\$12,471	-\$178,944	-\$85,936	\$1,465,174	\$0
Tax Rate Before Revenue Sharing		\$6.60	\$7.06	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	
Tax Rate With Revenue Sharing	R_j	\$6.75	\$7.82	\$4.52	\$9.42	\$6.00	\$6.60	\$13.33	
Per Capita Spending		\$328.41	\$425.33	\$252.86	\$800.50	\$263.24	\$548.87	\$400.30	
E.V. per capita (before) (000's)		\$49.74	\$60.24	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	
E.V. per capita (with revenue sharing)(000's)		\$48.64	\$54.41	\$55.99	\$84.95	\$43.86	\$83.16	\$30.04	

^{1.} Excluding the Town of Raymond and the Town of Yorkville.

Table 18
Proposed Tax Base Sharing Model
Option 1 Using Total Commercial / Industrial Values, 40% Commercial Base Factor and 20% Distribution Factor
Eastern Racine County Municipalities, 1998 (Including Yorkville and Raymond)

1. Municipal Data		T. Caledonia	T. Mt. Pleasant	T. Yorkville	T. Raymond	V. Elmwood Park	V. North Bay	V. Sturtevant	V. Wind Point	C. Racine	Total
Population	P_j	22,654	22,248	3,047	3,348	524	248	3,875	1,904	85,552	143,400
Tax Rate	R_j	\$6.60	\$7.06	\$2.36	\$2.53	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	
Equalized Value (000's)	B _j	\$1,126,898	\$1,340,313	\$231,288	\$225,155	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,807,209
E.V. per capita (000's)	B_j/P_j	\$49.74	\$60.24	\$75.91	\$67.25	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	\$40.50
Guaranteed Base E.V. per capita (000's) (solved)	Bj/P _j	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35	\$44.35
Commercial/Industrial Tax Base (000's)	l _j	\$119,868	\$318,262	\$60,441	\$35,830	\$1,421	\$0	\$90,422	\$8,405	\$637,435	\$1,272,085
Household Tax Base (000's)	H _j	\$1,007,030	\$1,022,051	\$170,847	\$189,325	\$28,618	\$22,390	\$109,368	\$162,943	\$1,822,551	\$4,535,124
Budget Tax Revenues	REV_j	\$7,439,848	\$9,462,640	\$546,392	\$569,321	\$132,498	\$198,524	\$1,020,054	\$1,045,053	\$34,246,500	\$54,660,830
Guaranteed Tax Base (000's)	\mathbf{B}_{j}	\$1,004,639	\$986,634	\$135,126	\$148,474	\$23,238	\$10,998	\$171,845	\$84,437	\$3,793,982	\$6,359,373
2. Calculation of Municipality Base Contribution											
Share Commercial / Industrial	а	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%
Contribution Toward Area Wide Tax Base (000's)	a*I _j	\$47,947	\$127,305	\$24,176	\$14,332	\$569	\$0	\$36,169	\$3,362	\$254,974	\$508,834
3. Calculation of Municipality Base Distribution											
Distribution Factor	b	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Distribution Base (000's)	b(B _j - H _j)	-\$478	-\$7,083	-\$7,144	-\$8,170	-\$1,076	-\$2,278	\$12,495	-\$15,701	\$394,286	\$364,850
4. Calculation of Net Revenue Transfer											
Net Base Transfer	b(B _j - H _j) -a*I _j	-\$48,425	-\$134,388	-\$31,321	-\$22,502	-\$1,645	-\$2,278	-\$23,674	-\$19,063	\$139,312	-\$143,984
Net Revenue Transfer	$\mathbf{R}_{j}^{*}(\mathbf{b}(\mathbf{B}_{j} - \mathbf{H}_{j}) - \mathbf{a}^{*}\mathbf{I}_{j})$	-\$334,063	-\$1,054,516	-\$85,581	-\$63,216	-\$7,674	-\$22,490	-\$137,116	-\$130,822	\$1,835,478	\$0
5. Determine Local Tax Rate											
Equalized Value		\$1,126,898	\$1,340,313	\$231,288	\$225,155	\$30,040	\$22,390	\$199,791	\$171,348	\$2,459,986	\$5,807,209
Less: Contribution Base Value Plus Net Distribution Base Value		-\$47,947 -\$478	-\$127,305 -\$7,083	-\$24,176 -\$7.144	-\$14,332 -\$8,170	-\$569 -\$1,076	\$0 -\$2,278	-\$36,169 \$12,495	-\$3,362 -\$15,701	-\$254,974 \$394,286	-\$508,834 \$364,850
Local Effective Tax Base		\$1,078,472	\$1,205,925	\$199,967	\$202,653	\$28,395	\$20,112	\$176,117	\$152,285	\$2,599,298	\$5,663,224
Budget Tax Revenues (000's)		\$7,440	\$9,463	\$546	\$569	\$132	\$199	\$1,020	\$1,045	\$34,247	\$54,661
Effective Local Tax Rate (with revenue sharing)	\mathbf{R}_{j}	\$6.90	\$7.85	\$2.73	\$2.81	\$4.67	\$9.87	\$5.79	\$6.86	\$13.18	
6. Community Impacts											
Net Distribution		-\$334,063	-\$1,054,516	-\$85,581	-\$63,216	-\$7,674	-\$22,490	-\$137,116	-\$130,822	\$1,835,478	\$0
Tax Rate Before Revenue Sharing		\$6.60	\$7.06	\$2.36	\$2.53	\$4.41	\$8.87	\$5.11	\$6.10	\$13.92	
Tax Rate With Revenue Sharing		\$6.90	\$7.85	\$2.73	\$2.81	\$4.67	\$9.87	\$5.79	\$6.86	\$13.18	
Per Capita Spending		\$328.41	\$425.33	\$179.32	\$170.05	\$252.86	\$800.50	\$263.24	\$548.87	\$400.30	
E.V. per capita (before) (000's)		\$49.74	\$60.24	\$75.91	\$67.25	\$57.33	\$90.28	\$51.56	\$89.99	\$28.75	
E.V. per capita (with revenue sharing)(000's)		\$47.61	\$54.20	\$65.63	\$60.53	\$54.19	\$81.10	\$45.45	\$79.98	\$30.38	

APPENDIX 10

AN OVERVIEW OF THE WISCONSIN SHARED REVENUE PROGRAM

AN OVERVIEW OF THE WISCONSIN SHARED REVENUE PROGRAM

The state shared revenue program provides aid to municipalities and counties that can be used for any local expenditures. The program is intended to provide property tax relief, to equalize the revenue raising ability among municipalities, and provide compensation for municipalities with tax-exempt utility property. Aside from school aids, this program is the largest category of state revenue transfers to municipalities. In general, a local government with a low per capita valuation receives more aid than a similar unit with a high per capita valuation. Also, a local government with a high per capita spending level receives more aid than a similar unit which has a low per capita spending level.

The shared revenue payment consists of four components: the per capita payment, the utility payment, the aidable revenues payment, and the minimum-maximum adjustment. Each municipality receives at least the per capita payment, and may receive all or some of the other components. The payment amounts are determined as follows:

<u>Per Capita</u>. Each municipality receives a fixed amount per capita, determined on an annual basis. In 1998, the per capita payment was about \$27.27, and will be approximately \$27.13 per capita in 1999.

<u>Utility</u>. The utility payment consists of three components: ad valorem payment, spent nuclear fuel storage, and minimum payment.

Ad Valorem Payment. Municipalities and counties receive a payment for certain light, heat and power utility property taxed by the state. The state pays a total of 9 mills for the net book value of utility production plants, substations, and general structures, but not for land. If the property is located in a town, 6 mills are paid to the county and 3 mills are paid to the town. If the property is located in a city or village, the city or village receives 6 mills and the county receives 3 mills. The limit on the value of qualifying utility property is \$125 million for each utility company operating in the municipality. The total payment is limited to \$300 per capita for municipalities. The net book value of utility property is the greater of: 1) the net book value on December 31, 1989, less any portion of the property that the utility has ceased to use; or 2) the net book value on December 31 of the year prior to the payment.

As an example, Table 1 shows City A, with population 3,300, located in a county with total population of 5,300. Since the municipality is a city, the municipality receives \$6 per \$1,000 of utility company property value, while the county receives \$3 per \$1,000. There are two utility companies located in the city. One of them had a net book value of \$200 million as of December 31, 1989, which has since declined to \$124 million as of December 31, 1997. The qualifying value would be the higher of these two values, except that it cannot exceed \$125 million. Therefore, the qualifying value for this utility is set at \$125 million. The second utility had a net book value of \$53 million on December 31, 1989 and a net book value of \$51 million as of December 31, 1997. The higher of these two values, \$53 million, is used for the ad valorem payment. The total qualifying value of the utility property is \$178 million. This amount would yield per capita payments of \$324 to City A and \$101 to County B, which exceed the per capita limits of \$300 and \$100. Both payments are reduced to the per capita limits, resulting in a total payment of \$990,000 to the City and \$530,000 to the County.

<u>Spent Nuclear Fuel Storage</u>. A payment of \$50,000 is made annually to a municipality and county in which nuclear fuel is stored as of December 31 of the prior year. If the fuel storage is located one mile or less from another municipality, that municipality receives

\$10,000, while the municipality in which the fuel is stored receives the remaining \$40,000. There is no per capita limit on this payment.

Minimum Payment. For a municipality or county with an electric generating plant with a rated capacity of 200 megawatts or more, the utility payment can be no lower than the lesser of \$75,000 or the \$300/\$100 per capita payment limit.

Aidable Revenues. The purpose of this component is to equalize the tax rate needed to fund a given level of per capita spending among municipalities with different levels of equalized value per capita. Municipalities with high locally raised revenues and low fiscal capacity generally receive larger aidable revenues transfers. In general, the formula calculates a municipality's aidable revenues as the recent three-year average of locally raised revenues times the weighted tax base. The weighted tax base is the difference between the state's standard value per capita for the given year and the municipality's equalized value per capita, expressed as a percentage of the state's standard value per capita. In other words, the lower the municipality's equalized value per capita in comparison to the state's standard value, the higher the weighted tax base and the larger the amount of aidable revenues received by the municipality. The municipality's equalized value does not include manufacturing property, as a means of offsetting costs associated with manufacturing property. The state's standard value is set each year to an amount that will ensure that the funds available for distribution equal the total entitlements to all municipalities. It also acts as a sort of guaranteed minimum tax base in the aidable revenues formula.

Table 2 demonstrates the aidable revenues formula calculation for 1998 for a sample municipality with a 1997 population of 3,300. The 1998 calculation uses the average of the 1994, 1995 and 1996 local purpose revenues. Local purpose revenues include local property taxes and miscellaneous taxes, local charges for services and income from licenses, permits, ordinance violations, interest income and other miscellaneous local income. The equalized value per capita is the 1997 total equalized value less manufacturing property, divided by the 1997 population, yielding an equalized value per capita of \$30,303. This is significantly less than the 1998 standard value per person, so this municipality would receive aidable revenues equal to more than 35% of its average local revenues for 1994-1996.

Minimum Payment – Maximum Adjustment. Each year, the minimum payment to each municipality may not be less than 95% of the previous year's payment. In some cases, this means that a municipality receives more than its share as calculated by the formulas. In order to fund this difference between the calculated amount and the municipality's minimum payment, the program also includes a maximum adjustment provision. The maximum adjustment provision funds the minimum payments by setting a maximum allowable increase for all municipalities. Under this provision, any municipalities which would exceed the maximum allowable increase under the formula have their payments decreased to meet the maximum allowable increase. The maximum allowable increase percentage is set to the level at which total payment reductions exactly equal the increased funds needed to make the minimum payments.

WISCONSIN SMALL MUNICIPALITIES SHARED REVENUE PROGRAM

The Small Municipalities Shared Revenue Program is designed to provide aid to small municipalities with low equalized value. The program has been operating since 1994, but since 1996, maximum funding for the program was set at \$10 million per year. In order to qualify for the program, a municipality must have a population of less than 5,000, a municipal property tax rate of at least \$1 per \$1,000 equalized value, and an equalized value (EV), excluding manufacturing property, of no more than \$40 million. The municipal tax rate is defined as the total levy for municipal purposes, excluding levies for tax incremental financing districts and less

any surplus applied to reduce school or county levies, divided by the total equalized value excluding TIF incremental value.

The payment calculation is a several step process, in which a base entitlement, a minimum entitlement and a maximum entitlement are calculated, and then the three are compared to determine the actual entitlement. All calculations use the municipality's equalized value, less manufacturing value, and population from the previous year. The entitlements are calculated as follows:

<u>Base entitlement.</u> The base entitlement is the greater of \$10 per capita or the result of the following equation:

Base entitlement = [\$55 - (Municipal EV / \$40,000,000) x \$55] x Population

Municipalities with an equalized value of \$32,727,273 or more are eligible for the base entitlement of \$10 per capita.

<u>Minimum Entitlement</u>. The minimum entitlement is the greater of zero or the following calculation:

Minimum entitlement = [\$18,000 - (Municipal EV / \$1,000,000) x \$750]

The minimum entitlement is intended to provide more aid to municipalities with equalized values of less than \$25 million.

<u>Maximum Entitlement.</u> The maximum entitlement is the greater of \$10,000 or the following calculation:

Maximum entitlement = $[\$45,000 - (Municipal EV / \$1,000,000) \times \$1,750]$

The maximum entitlement is set to prevent unduly large payments. For municipalities with more than \$20 million of equalized value, the maximum entitlement is \$10,000.

Once the base, minimum and maximum entitlements are calculated, the three are compared to determine an actual entitlement. This is calculated as follows:

- (a) If base entitlement < minimum entitlement, then the minimum entitlement is used.
- (b) If base entitlement > maximum entitlement, then the maximum entitlement is used.
- (c) If neither (a) nor (b) apply, then the base entitlement is used. In other words, if minimum entitlement < base entitlement < maximum entitlement, use base entitlement.

If the total funding is not sufficient to pay all of the entitlements, then the entitlements are prorated.

In general, a municipality will qualify for its maximum entitlement if its net equalized value is less than or equal to \$32 million and its population is greater than 925. As equalized value decreases, the population level required to qualify for the maximum entitlement also decreases. For municipalities with EV between \$24 million and \$32 million, if the population is below a certain level, the municipality will qualify for its base entitlement. For municipalities with EV less than \$24 million, if the population is below a certain level, the municipality will qualify for its minimum entitlement.

These formulas do not take into account equalized value per capita, which can lead to redistribution to wealthier communities. Tables 3 and 4 show examples of the payments that would be made to three municipalities under this program. Municipality A and Municipality B are actual municipalities. Municipality C is a hypothetical municipality used for illustration purposes. In Table 3, all three municipalities have low equalized value and low population, resulting in relatively high equalized value per capita. Municipality A has a very low population and equalized value below \$24 million, so it receives its minimum entitlement. Municipality B has equalized value between \$24 million and \$32 million and a low population, so it receives its base entitlement. Municipality C has equalized value between \$24 million and \$32 million and a higher population, so it receives its maximum entitlement. The formula results in the municipality with the lowest EV receiving the highest payment, and the municipality with the highest net EV receives the lowest payment. However, the formula has the opposite result in terms of EV per capita. The municipality with the highest EV per capita receives the largest payment, while the municipality with the lowest EV per capita receives the lowest payment.

In Table 4, Municipality A and Municipality B have the same EV and population, but Municipality C has a larger population and a lower EV than in the previous example. Municipality C still receives its maximum entitlement of \$10,000 because its net EV is greater than or equal to \$20 million. However, with its higher population, its EV per capita is extremely low. In spite of the fact that its EV per capita is less one-sixth that of Municipality A, it still receives a lower payment.

Table 1 Ad Valorem Utility Payment, 1998 Sample Municipality

				Ad Valorem		Ad Valorem	
	Net Book Value,	Net Book Value,	Qualifying Net	Payment to	Per Capita	Payment to	Per Capita
	12/31/89	12/31/97	Book Value	Muncipality	Payment	County	Payment
Utility Company A	\$200,000,000	\$124,000,000	\$125,000,000	\$750,000	\$227.27	\$375,000	\$70.75
Utility Company B	\$53,000,000	\$51,000,000	\$53,000,000	\$318,000	\$96.36	\$159,000	\$30.00
Adjustment				-\$78,000	-\$23.64	-\$4,000.00	-\$0.75
Total	\$253,000,000	\$175,000,000	\$178,000,000	\$990,000	\$300.00	\$530,000	\$100.00

	Municipality		
Municipality	Type	Mil Rate	1997 Population
City A	City	\$6	3,300
County B	County	\$3	5,300

Table 2 Aidable Revenues Payment, 1998 Sample Municipality

DATA

	1994 Local Purpose Revenues	1995 Local Purpose Revenues	1996 Local Purpose Revenues	1997 Population	Total 1997 Equalized Value	1997 Mfg. EV	1997 Standard Value per Person (1)	
City A	\$1,000,000	\$1,100,000	\$1,200,000	3,300	\$150,000,000	\$50,000,000	\$46,962	
FACTORS								
Local Purpo	se Revenues =	Ave. of 1994 - 1		\$1,100,000				
Equalized V	'alue per Capita	= (Total EV - N		\$30,303				

0.3547

AIDABLE REVENUES CALCULATION

Tax Base Weight = 1 - [(EV per Capita) / (Standard Value per Person)]

Municipal Aidable Revenues = Local Purpose Revenues x Tax Base Weight \$390,206

Notes:

1. Value is computed by the State to ensure that total funds available for distribution equal total entitlements. Acts as a state guaranteed tax base.

Table 3 Small Municipalities Shared Revenue Program Sample Computations

		1997 Total	1997 Mfg.	1997 Net	
		Equalized	Equalized	Equalized	Total EV
	1997 Population	Value	Value	Value	Per Capita
Municipality A	248	\$23,175,900	\$0	\$23,175,900	\$93,451
Municipality B	531	\$27,345,600	\$0	\$27,345,600	\$51,498
Municipality C	950	\$65,000,000	\$40,000,000	\$25,000,000	\$68,421

BASE ENTITLEMENT

Base Entitlement = The greater of [\$55 - (Munic. EV / \$40,000,000) x \$55] x Population; OR [\$10 x Population]

Municipality A	Base Entitlement	\$5,737
Municipality B	Base Entitlement	\$9,239
Municipality C	Base Entitlement	\$19,594

MINIMUM ENTITLEMENT

Minimum Entitlement = The greater of \$0; OR [\$18,000 - (Municipal EV / \$1,000,000) x \$720]

Municipality A	Minimum Entitlement	\$1,313
Municipality B	Minimum Entitlement	\$0
Municipality C	Minimum Entitlement	\$0

MAXIMUM ENTITLEMENT

 $Max\ Entitlement = The\ greater\ of\ \$10,000;\ OR\ [\ \$45,000\ -\ (Municipal\ EV\ /\ \$1,000,000)\ x\ \$1,750\]$

Municipality A	Max Entitlement	\$10,000
Municipality B	Max Entitlement	\$10,000
Municipality C	Max Entitlement	\$10,000

ACTUAL ENTITLEMENT

Actual Entitlement is calculated as follows:

- a) If base entitlement < minimum entitlement, use minimum entitlement
- b) If base entitlement > maximum entitlement, use maximum entitlement
- c) If (a) and (b) do not apply, use base entitlement

Municipality A	Actual Entitlement	\$5,737
Municipality B	Actual Entitlement	\$9,239
Municipality C	Actual Entitlement	\$10,000

Municipality A: Village of North Bay Municipality B: Village of Elmwood Park Municipality C: Made up for illustration purposes

Table 4 Small Municipalities Shared Revenue Program Sample Computations

		1997 Total	1997 Mfg.	1997 Net	
		Equalized	Equalized	Equalized	Total EV
	1997 Population	Value	Value	Value	Per Capita
Municipality A	248	\$23,175,900	\$0	\$23,175,900	\$93,451
Municipality B	531	\$27,345,600	\$0	\$27,345,600	\$51,498
Municipality C	2000	\$30,000,000	\$10,000,000	\$20,000,000	\$15,000

BASE ENTITLEMENT

Base Entitlement = The greater of [\$55 - (Munic. EV / \$40,000,000) x \$55] x Population; OR [\$10 x Population]

Municipality A	Base Entitlement	\$5,737
Municipality B	Base Entitlement	\$9,239
Municipality C	Base Entitlement	\$55,000

MINIMUM ENTITLEMENT

Minimum Entitlement = The greater of \$0; OR [\$18,000 - (Municipal EV / \$1,000,000) x \$750]

Municipality A	Minimum Entitlement	\$1,313
Municipality B	Minimum Entitlement	\$0
Municipality C	Minimum Entitlement	\$3,600

MAXIMUM ENTITLEMENT

 $Max\ Entitlement = The\ greater\ of\ \$10,000;\ OR\ [\ \$45,000\ -\ (Municipal\ EV\ /\ \$1,000,000)\ x\ \$1,750\]$

Municipality A	Max Entitlement	\$10,000
Municipality B	Max Entitlement	\$10,000
Municipality C	Max Entitlement	\$10,000

ACTUAL ENTITLEMENT

Actual Entitlement is calculated as follows:

- a) If base entitlement < minimum entitlement, use minimum entitlement
- b) If base entitlement > maximum entitlement, use maximum entitlement
- c) If (a) and (b) do not apply, use base entitlement

Municipality A	Actual Entitlement	\$5,737
Municipality B	Actual Entitlement	\$9,239
Municipality C	Actual Entitlement	\$10,000

Municipality A: Village of North Bay Municipality B: Village of Elmwood Park Municipality C: Made up for illustration purposes

APPENDIX 11

AN ANALYSIS OF THE FISCAL CAPACITY IMPACTS OF REVENUE SHARING PROGRAMS FOR MUNICIPALITIES IN EASTERN RACINE COUNTY

AN ANALYSIS OF THE FISCAL CAPACITY IMPACTS OF REVENUE SHARING PROGRAMS FOR MUNICIPALITIES IN EASTERN RACINE COUNTY

Introduction

It has been demonstrated that fiscal disparities exist between the City of Racine and other municipalities in Eastern Racine County. Racine has a lower equalized value per capita than surrounding municipalities and the gap has continued to grow in the past decade. Ruekert/Mielke has proposed a property tax based revenue sharing program for Eastern Racine County. This program is intended to reduce existing fiscal capacity disparities among municipalities in the region. The State of Wisconsin administers the Shared Revenue Program, which is a system of aids to municipalities that are intended to partially reduce fiscal disparities between communities across the state. It may be appropriate to evaluate the extent to which the state program effectively reduces fiscal capacity disparities among municipalities in Eastern Racine County before implementation of a regional revenue sharing program.

This analysis will examine the impact that the shared revenue program has on the effective fiscal capacity of municipalities in Eastern Racine County and will evaluate to what extent the program reduces fiscal capacity disparities. This analysis will also evaluate the combined impact of the state shared revenue program and the proposed regional shared revenue program to determine what level of fiscal capacity equalization is effectively attained by the combined impact of the two programs.

Analysis

Fiscal capacity of a municipality can be expressed in terms of equalized property value per capita. Fiscal capacity determines what tax rate is required to provide a given level of services. Alternatively, fiscal capacity determines what level of services can be provided at a given tax rate. Therefore, if two municipalities provide the same level of services per capita, the municipality with the higher fiscal capacity will have the lower tax rate.

Table 1 provides an analysis of the state shared revenue program's impact on effective fiscal capacity for seven municipalities in Eastern Racine County. Columns 6 and 7 show the annual tax levy and shared revenue amounts for each municipality. As shown in column 7, all municipalities, regardless of wealth in terms of fiscal capacity, receive state shared revenue aids. Column 8 shows the sum of the municipal tax levy and the state shared revenue payments for each municipality and represents the total spending available for the provision of municipal services. This level of spending can be maintained with the given tax levy, equalized value and state shared revenue amounts for each municipality.

The state shared revenue aid payments to municipalities allow for a higher level of municipal spending at a given tax rate. Without state revenue aids, municipalities would require higher tax rates in order to maintain the existing levels of total spending as calculated in Column 9. Therefore, the state revenue sharing program has the same effect as raising each municipality's equalized value and fiscal capacity. Given that the state shared revenue program effectively increases each and every municipality's equalized value per capita, is there an equalization of fiscal capacity taking place?

The effective addition to fiscal capacity resulting from the shared revenue program can be calculated by dividing the shared revenue amount for each municipality by the respective tax rates (Column 10). This result can be added to each community's reported equalized value to determine a total effective equalized value (Column 11). This figure represents the equalized value that each municipality would need to have to maintain the given total spending level if state revenue sharing aid was not available. Therefore, it can be said that the shared revenue

program effectively increases a municipality's total equalized value from the actual equalized value shown in column 3 to the effective equalized value in column 11.

Column 12 shows the effective equalized value per capita after considering the impact of shared revenue aids. As shown by comparing columns 12 and 5, the fiscal capacity of each community is effectively increased by the state shared revenue aid. If a municipality's effective fiscal capacity increases, then the municipality will be able to have lower taxes at a given level of service or a higher level of service at a given tax rate.

To determine whether or not fiscal capacity disparities are reduced by the state revenue sharing program each municipality's actual equalized value per capita can be compared with the equalized value adjusted for the impact of the state aid. This comparison is displayed in Table 2. The overall level of fiscal capacity disparity can be measured by taking the standard deviation of the fiscal capacity measures for all seven communities. The standard deviation is a measure of how widely values are dispersed from the mean or average value. If there were no disparities in fiscal capacities then the standard deviation would be zero. Before considering the impact of the State program, the standard deviation of fiscal capacities is \$19,922. The average fiscal capacity for the outlying municipalities is 201% of that of the City of Racine. This demonstrates the existence of fiscal capacity disparities and the fact that large disparities exist between Racine and the other municipalities. Taking into consideration the effective increase in fiscal capacity resulting from state shared revenue, the standard deviation of fiscal capacities is \$18,950 and the average effective fiscal capacity of the outlying communities is 132% of that of Racine. Therefore, it can be said that the state shared revenue program does reduce fiscal disparities in terms of effective fiscal capacity. As measured by the standard deviation, fiscal disparity is reduced by approximately 5%. However, even with state shared revenues, the effective fiscal capacity of the City of Racine is still significantly less than that of the surrounding municipalities. For surrounding municipalities, the effective fiscal capacities range from 114% to 200% of that of Racine. This demonstrates that the state shared revenue program does not fully equalize effective fiscal capacities.

Since the state program does not fully equalize effective fiscal capacities, a regional revenue sharing program could be designed to bring about more equity in fiscal capacity. Table 3 calculates the amount of regional revenue shifting that would be required to bring about a true equalization of fiscal capacity after considering the impact of the state program. A regional revenue sharing program would be based upon the premise that all net local revenue distributions would sum to zero. This means that the program would be self-funded and not dependent upon outside funding sources. Fiscal capacity equalization would require each municipality's effective equalized value to be equal to that in Column 9. With fiscal capacity levels equalized, each municipality would have a tax rate equal to that in Column 10. This would require net municipal revenue distributions as shown in column 11. As shown, the City of Racine would need approximately \$3.6 million in shared revenue from the other municipalities to bring about complete fiscal capacity equalization.

A property tax revenue sharing program which shares a portion of the commercial and industrial tax base between the communities served by Racine is currently being considered. Table 4 provides an analysis of the impact on local fiscal capacity of the proposed revenue sharing plan after first taking into consideration the impacts of the state revenue sharing program. The proposed distributions, based upon 1998 data, are shown in column 10. The given net distribution amounts would result in effective equalized values, after considering the impact of the state shared revenue program, as shown in column 12. The net effective fiscal capacities, in terms of equalized value per capita, after considering both the state and the proposed revenue sharing plans are shown in column 13. As shown, disparities in fiscal capacity exist even after considering the combined impacts of both the state revenue sharing program and the proposed regional revenue sharing program.

Table 5 provides a summary and comparison of the municipal impacts of the state shared revenue program and the proposed regional revenue sharing program. The state revenue sharing program effectively reduces the fiscal capacity disparities to some extent. The proposed regional revenue sharing program further reduces these disparities after first considering the impact of the state program. However, disparities in fiscal capacity exist even after considering the combined impacts of both the state program and the proposed regional program. The weighted average adjusted fiscal capacity for surrounding communities would be approximately 118% of that of Racine after considering the impact of the state and proposed regional revenue sharing plans.

Conclusion

It has been shown that the state shared revenue program does reduce the disparities in fiscal capacity between communities in Eastern Racine County. However the disparities are only partially reduced and the state revenue sharing program does not result in a total equalization of fiscal capacity. Such a leveling of fiscal capacity would require changes in the state revenue sharing formulas that would result in massive increases in the amount of shared revenue aids to poorer communities statewide. This would require a huge increase in state taxes and would not be politically feasible.

After considering the impact of state revenue sharing on effective fiscal capacity, large disparities still exist between the City of Racine and the other municipalities in Eastern Racine County. The fiscal capacity disparities and the fact that the City has extended sewer service to surrounding municipalities have left the City at a disadvantage in competition for new development. A regional revenue sharing program offers an alternative that goes a step further than the state revenue sharing program in terms of reducing fiscal disparities with the financial redistribution burden placed upon the municipalities that have benefited from economic growth in the region. The regional revenue sharing program proposed by Ruekert/Mielke is not intended to bring about a total effective equalization of fiscal capacities. Rather, it is intended to provide a politically acceptable means for municipalities to reduce fiscal disparities and share in the benefits of economic development, and foster increased intergovernmental cooperation in the region.

Table 1
City Of Racine
Intergovernmental Relations Study
Wisconsin State Revenue Sharing Program - Analysis of Impact on Effective Local Fiscal Capacity

1	2	3	4	5	6	7	8	9	10	11	12
			Tax Rate					Required Rate	Effective Add.		
		(with revenue	E.V		Shared		(without	Equalized Value	Total Effective	Effective
Municipality	Population	Equalized Value	sharing)	per Capita	Tax Levy	Revenues	Total Spending	rev. sharing)	from Shared Rev.	Equalized Value	E.V./Capita
T. Caledonia	22,654	\$1,126,897,800	\$6.60	\$49,744	\$7,439,848	\$1,360,040	\$8,799,888	\$7.809	\$206,002,338	\$1,332,900,138	\$58,837
T. Mt. Pleasant	22,248	\$1,340,313,000	\$7.06	\$60,244	\$9,462,640	\$862,548	\$10,325,188	\$7.704	\$122,173,548	\$1,462,486,548	\$65,736
T. Yorkville	3,047	\$231,288,000	\$2.36	\$75,907	\$546,392	\$83,389	\$629,781	\$2.723	\$35,298,604	\$266,586,604	\$87,492
T. Raymond	3,348	\$225,155,000	\$2.53	\$67,251	\$569,321	\$91,278	\$660,599	\$2.934	\$36,098,612	\$261,253,612	\$78,033
V. Elmwood Park	524	\$30,039,600	\$4.41	\$57,327	\$132,498	\$21,958	\$154,456	\$5.142	\$4,978,260	\$35,017,860	\$66,828
V. North Bay	248	\$22,390,200	\$8.87	\$90,283	\$198,524	\$18,872	\$217,396	\$9.709	\$2,128,447	\$24,518,647	\$98,866
V. Sturtevant	3,875	\$199,790,800	\$5.11	\$51,559	\$1,020,054	\$1,033,712	\$2,053,766	\$10.280	\$202,465,896	\$402,256,696	\$103,808
V. Wind Point	1,904	\$171,348,200	\$6.10	\$89,994	\$1,045,053	\$80,152	\$1,125,205	\$6.567	\$13,141,822	\$184,490,022	\$96,896
C. Racine	85,552	\$2,459,986,100	\$13.92	\$28,754	\$34,246,500	\$27,450,697	\$61,697,197	\$25.080	\$1,971,831,663	\$4,431,817,763	\$51,803
Total	143,400	\$5,807,208,700		\$40,497	\$54,660,830	\$31,002,646	\$85,663,476	\$14.751	\$2,594,119,192	\$8,401,327,892	\$58,587
Total Excluding Racine	57,848	\$3,347,222,600		\$57,862	\$20,414,330	\$3,551,949	\$23,966,279		\$622,287,529	\$3,969,510,129	\$68,620

Notes on Calculations:

Columns 2, 3, 6 and 7 - from source data (1998).

Column 4 - equals 1,000 times (column 6 divided by column 3).

Column 5 - equals column 3 divided by column 2.

Column 8 - equals column 6 plus column 7.

Column 9 - equals 1,000 times (column 8 divided by column 3).

Column 10 - equals 1,000 times (column 7 divided by column 4).

Column 11- equals column 3 plus column 10.

Column 12- equals column 11 divided by 2.

Table 2
City Of Racine
Intergovernmental Relations Study
Comparison
Fiscal Capacity vs. Effective Fiscal Capacity After State Revenue Sharing

				Aid Adjusted
	E.V	E.V./Capita	Aid Adjusted	E.V./Capita
Municipality	per Capita	Compared to Racine	E.V./Capita	Compared to Racine
T. Caledonia	\$49,744	173%	\$58,837	114%
T. Mt. Pleasant	\$60,244	210%	\$65,736	127%
T. Raymond	\$75,907	264%	\$87,492	169%
T. Yorkville	\$67,251	234%	\$78,033	151%
V. Elmwood Park	\$57,327	199%	\$66,828	129%
V. North Bay	\$90,283	314%	\$98,866	191%
V. Sturtevant	\$51,559	179%	\$103,808	200%
V. Wind Point	\$89,994	313%	\$96,896	187%
Average	\$57,862	201%	\$68,620	132%
C. Racine	\$28,754	100%	\$51,803	100%
Standard Deviation Percent Reduction	\$19,922		\$18,950 5%	

Table 3
City Of Racine
Intergovernmental Relations Study
Wisconsin State Revenue Sharing Program - Calculated Local Aid Adjustments Required for Total Effective Equalization of Fiscal Capacity

1	2	3	4	5	6	7	8	9	10	11	12
							Fiscal Capacity	Fiscal Capacity	Fiscal Capacity	Additional	Tax Rate
			Tax Rate	Shared	Total	Aid Adjusted	Leveled	Leveled	Leveled	Aid Required	Impact
Municipality	Population	Equalized Value (w rev share)	Revenues	Spending	E.V./Capita	E.V./Capita	Effective E.V.	Tax Rate		
T. Caledonia	22,654	\$1,126,897,800	\$6.60	\$1,360,040	\$8,799,888	\$58,837	\$57,842	\$1,310,354,107	\$6.72	-\$128,010	\$0.114
T. Mt. Pleasant	22,248	\$1,340,313,000	\$7.06	\$862,548	\$10,325,188	\$65,736	\$57,842	\$1,286,870,229	\$8.02	-\$1,291,345	\$0.963
T. Raymond	3,047	\$231,288,000	\$2.36	\$83,389	\$629,781	\$87,492	\$57,842	\$176,244,768	\$3.57	-\$280,077	\$1.211
T. Yorkville	3,348	\$225,155,000	\$2.53	\$91,278	\$660,599	\$78,033	\$57,842	\$193,655,229	\$3.41	-\$198,730	\$0.883
V. Elmwood Park	524	\$30,039,600	\$4.41	\$21,958	\$154,456	\$66,828	\$57,842	\$30,309,241	\$5.10	-\$20,584	\$0.685
V. North Bay	248	\$22,390,200	\$8.87	\$18,872	\$217,396	\$98,866	\$57,842	\$14,344,832	\$15.16	-\$140,800	\$6.288
V. Sturtevant	3,875	\$199,790,800	\$5.11	\$1,033,712	\$2,053,766	\$103,808	\$57,842	\$224,137,996	\$9.16	-\$810,620	\$4.057
V. Wind Point	1,904	\$171,348,200	\$6.10	\$80,152	\$1,125,205	\$96,896	\$57,842	\$110,131,289	\$10.22	-\$705,602	\$4.118
C. Racine	85,552	\$2,459,986,100	\$13.92	\$27,450,697	\$61,697,197	\$51,803	\$57,842	\$4,948,504,219	\$12.47	\$3,575,768	-\$1.454
Total	143,400	\$5,807,208,700		\$31,002,646	\$85,663,476	\$58,587	\$57,842	\$8,294,551,910		\$0	

Notes on Calculations:

Columns 2, 3, 4, 5, 6, 7 - from Table 1

Column 8 - solved so that column 11 totals to 0.

Column 9 - equals column 8 times column 2.

Column 10 - equals 1,000 times (column 6 divided by column 9)

Column 11 - equals (column 4 minus column 10) times column 3 divided by 1,000

Column 12 - equals 1,000 times column 11 divided by column 3.

Table 4
City Of Racine
Intergovernmental Relations Study
Analysis of Impact on Effective Local Fiscal Capacity Wisconsin's State Revenue Sharing Program and Intercommunity Revenue Sharing Plan
Fiscal Capacity vs. Effective Fiscal Capacity After State and Local Revenue Sharing

1	9	10	11	12	13
	Effective Equalized		Effective Add.	Total Effective	
	Value (with	Local	Equalized Value	Equalized	Effective
Municipality	State Shared Rev.)	Rev Sharing	from Local Sharing	Value	E.V./Capita
T. Caledonia	\$1,332,900,138	-\$334,063	-\$50,599,774	\$1,282,300,364	\$56,604
T. Mt. Pleasant	\$1,462,486,548	-\$1,054,516	-\$149,364,376	\$1,313,122,171	\$59,022
T. Raymond	\$266,586,604	-\$63,216	-\$26,759,427	\$239,827,177	\$78,709
T. Yorkville	\$261,253,612	-\$85,581	-\$33,845,525	\$227,408,087	\$67,924
V. Elmwood Park	\$35,017,860	-\$7,674	-\$1,739,881	\$33,277,979	\$63,508
V. North Bay	\$24,518,647	-\$22,490	-\$2,536,543	\$21,982,105	\$88,638
V. Sturtevant	\$402,256,696	-\$137,116	-\$26,855,854	\$375,400,843	\$96,878
V. Wind Point	\$184,490,022	-\$130,822	-\$21,449,714	\$163,040,308	\$85,630
C. Racine	\$4,431,817,763	\$1,835,478	\$131,845,581	\$4,563,663,344	\$53,344
Total	\$8,401,327,892	\$0	-\$181,305,514	\$8,220,022,378	\$58,587
Total Excluding Racine	\$3,969,510,129	-\$1,835,478		\$3,656,359,034	\$63,206

Notes on Calculations:

Local revenue sharing assumes a 40% commercial/industrial tax base sharing factor and a 20% distribution factor.

Columns 2, 3 - from source data.

Column 4 - equals 1,000 x (column 6 divided by column 3).

Column 5 - equals column 3 divided by column 2.

Column 8 - equals column 6 plus column 7.

Column 9 - equals table 1 Column 11.

Column 10 - from proposed intercommunity revenue sharing plan.

Column 11- equals 1,000 x (column 10 divided by column 4).

Column 12- equals column 9 plus column 11.

Column 13- equals column 12 divided by column 2.

Table 5
City Of Racine
Intergovernmental Relations Study
Comparison
Fiscal Capacity vs. Effective Fiscal Capacity After State Revenue Sharing and Proposed Intercommunity Regional Revenue Sharing

					State Aid and	
			State Aid	State Aid Adjusted	R/M Rev. Sharing	
	E.V	E.V./Capita	Adjusted	E.V./Capita	Adjusted Effective	E.V./Capita
Municipality	per Capita	as Share of Racine	E.V./Capita	as Share of Racine	E.V./Capita	as Share of Racine
T. Caledonia	\$49,744	173%	\$58,837	114%	\$56,604	106%
T. Mt. Pleasant	\$60,244	210%	\$65,736	127%	\$59,022	111%
T. Raymond	\$75,907	264%	\$87,492	169%	\$78,709	148%
T. Yorkville	\$67,251	234%	\$78,033	151%	\$67,924	127%
V. Elmwood Park	\$57,327	199%	\$66,828	129%	\$63,508	119%
V. North Bay	\$90,283	314%	\$98,866	191%	\$88,638	166%
V. Sturtevant	\$51,559	179%	\$103,808	200%	\$96,878	182%
V. Wind Point	\$89,994	313%	\$96,896	187%	\$85,630	161%
Average	\$57,862	201%	\$68,620	132%	\$63,206	118%
C. Racine	\$28,754	100%	\$51,803	100%	\$53,344	100%
Standard Deviation Percent Reduction	\$19,922		\$18,950 5%		\$15,685 17%	

APPENDIX 12

AN ANALYSIS OF THE FISCAL IMPACTS
ON EASTERN RACINE COUNTY
MUNICIPALITIES OF THE PROPOSED
COST-SHARING FOR THE WTF
EXPANSION AND UPGRADE AND
INTERMUNICIPAL REVENUE SHARING

AN ANALYSIS OF THE FISCAL IMPACTS ON EASTERN RACINE COUNTY MUNICIPALITIES OF THE PROPOSED COST-SHARING FOR THE WTF EXPANSION AND UPGRADE AND INTERMUNICIPAL REVENUE SHARING

Introduction

The study of intergovernmental relations between the municipalities of Eastern Racine County proposed a number of intergovernmental cooperation measures designed to allow for incorporation of Mount Pleasant and Caledonia and at the same time providing a more equitable sharing of the costs of regional services, reduce disparities in fiscal capacity and reduce competition for new development in the region. Among other actions, the study recommended that communities in Eastern Racine County:

- 1. Share the cost of the Racine Wastewater Treatment Facility (WTF) expansion and upgrade according to a capital cost allocation methodology based on a purchase of treatment capacity rights.
- 2. Develop revenue sharing agreements with the City of Racine to compensate the City for a portion of its cost of funding the Racine Public Library, the Racine Zoological Gardens, and the Wustum Museum, all of which are regional services or amenities.
- 3. Develop revenue sharing agreements with the City of Racine to share property tax base and reduce fiscal capacity disparities within the region.

All of these proposed measures would have significant fiscal impacts on the participating communities. As part of the intergovernmental relations study, Ruekert/Mielke examined the estimated impacts on each community in terms of expected increases in sewer user charges, property tax rates, and impact fees. This report explains how these impacts were estimated and summarizes the expected impacts for each community.

Impact of the Wastewater Treatment Facility Expansion and Upgrade

As explained in the report titled "A Cost of Service Based Capital Cost Allocation Model for Expansion and Upgrade of the Racine Wastewater Treatment Facility," the cost of the planned WTF expansion and upgrade was allocated to each municipality, utility district or sanitary district in the sewer service area. Each of these entities will incur a share of the borrowing for the project costs in proportion to their allocated percentage share of the cost based on their projected use of the facilities. They will then recover that annual debt service from their respective existing and future retail sewer customers. Two methods for cost recovery were examined for this fiscal impact analysis, to determine the likely impact on the typical residential sewer customer: sewer user charges and impact fees.

The planned WTF expansion and upgrade has numerous components, each of which is required for a specific purpose. Some portions of the WTF need to be replaced because they are worn out or obsolete. Other components have insufficient capacity to handle either existing volumes of wastewater flows or projected future wastewater flows, or both. Since a large portion of the expanded capacity is needed to handle increased flows from anticipated future development, a portion of the cost could be recovered through impact fees charged to new development at the time a building permit is issued. The remainder of the cost, the share related to providing facilities to serve existing users, would most likely be recovered through sewer user charges.

Tables 1-4 demonstrate how the amounts of the sewer impact fee and increase in sewer user rates was estimated for each community, using the Town of Caledonia Utility District as an example. Table 1 shows the existing and projected 2020 average day flow, in terms of millions of gallons

per day (mgd), for the Town of Caledonia Utility District. The average day flow from the District is expected to increase by 0.76 mgd by 2020. Of the expected 2020 average day flow, approximately 61 percent will be from users that are already connected to the system, and 39 percent will be from new users. The average day flow is also converted to total annual flow, both existing and future. The District's total annual flow is expected to increase by 277.4 million gallons per year by 2020. It is assumed that the average residential equivalent connection (REC) within the Racine sewer service area generates approximately 132,000 gallons of wastewater per year, including infiltration and inflow. Therefore, current sewer customers in the District generate approximately 3,235 RECs of wastewater flow and the number of RECs is expected to increase by 2,102 by the year 2020.

Table 2 shows the Town of Caledonia Utility District's portion of the capital cost for the WTF expansion and upgrade, allocated between the share needed to remedy existing deficiencies in plant capacity and the share needed to provide capacity for future increased flows. The District's share of the project cost is \$7,340,517, of which \$3,944,013 is for the WTF and \$3,396,504 is for the construction of new sewer interceptors. Of the WTF costs, \$1,377,973 is for components that are needed to replace worn or obsolete equipment, and that were therefore allocated on the basis of Design (2020) Average Flow. Since these components were allocated based on total 2020 flow, the share of the cost related to providing for future increased flows is determined by multiplying the total cost by future flows as a percentage share of the total 2020 flows. The future share of the cost is \$542,621, or 39 percent of the total.

Another \$448,478 of the District's share of cost is for components needed to increase the capacity of the WTF to treat existing flows. Since this cost is entirely related to providing additional capacity to serve existing users, it is considered part of the deficiency share of the cost and is not eligible for recovery through impact fees.

Approximately \$2,117,562 of the District's share of the cost is for expanded capacity needed to serve future increases in wastewater flows generated by its sewer customers. Since this cost is entirely for increased future flows, all of this portion of the cost can be allocated to future share and recovered through impact fees.

The Facility Plan also recommended several interceptor sewers to relieve capacity in existing sewers and provide additional capacity for future flows. Since the interceptors will carry waste from the entire District, the District's share of the cost was allocated on the same overall percentage as the entire WTF project. Therefore, approximately \$1,105,608 was allocated to existing deficiency and \$2,290,896 was allocated to future development.

In total, \$2,389,437 of the project cost is related to remedying existing capacity deficiencies to serve existing users, and \$4,951,080 is related to providing expanded capacity for future users. Therefore, \$4,951,080, or 67 percent, of the District's share of the capital costs for the WTF and interceptors can be recovered through impact fees. Assuming that the Town obtains a Clean Water Fund loan at 2.97 percent interest for 20 years, the debt service payments will be approximately \$509,441 per year. The future growth share of the payment will be 67 percent, or \$343,611 per year. If the Town chooses to fund the future growth share of the debt service with impact fees, this could be accomplished by charging an impact fee of approximately \$3,270 per REC to new development within the Utility District, as shown in Table 2.

The remaining \$165,830 of debt service per year would be recovered through the sewer user charges imposed by the Utility District, as shown in Table 3. Based on the current estimate of 3,235 RECs within the District, this would result in an additional charge of \$51.26 per year per REC to fund the District's share of the WTF expansion debt service. The expanded WTF will also have additional operation and maintenance costs of \$4.80 per REC, so the total increase in sewer user charges will be approximately \$56.06 per year per REC.

<u>Impact of Revenue Sharing Programs</u>

The intergovernmental relations study also recommends regional revenue sharing agreements between the municipalities of Eastern Racine County. One such agreement would involve redistributing a portion of each municipality's commercial and industrial property tax base and the resulting tax revenues in order to partially equalize the property value per capita between municipalities. Another form of revenue sharing has also been proposed to reimburse the City of Racine for a portion of the cost of providing services, such as the library, the zoo and the art museum, that benefit the entire region. Although the formula for determining the magnitude of revenue payments would be different in each case, the same type of fiscal impact would result. A municipality that transfers part of its tax revenues to another municipality will need to increase its tax rate to raise the additional revenue, resulting in higher property taxes paid by residents and businesses of that municipality.

Table 4 calculates the increase in property taxes that would result for the owner of a \$100,000 home in the Town of Caledonia from each of these proposed revenue sharing arrangements. Based on 1998 data, the proposed fiscal equalization revenue sharing agreement would result in a tax rate increase of \$0.30 per \$1,000 of equalized value, or \$30 per year for the owner of a \$100,000 home. The total contributions by the Town for library, zoo and museum services would result in a tax rate increase of \$0.41 per \$1,000 of equalized value, or \$41 per year. In total, these two revenue sharing programs would increase the Town's tax rate by \$0.71 per \$1,000 of value, or \$71 per year for the owner of a \$100,000 home.

Summary of Community Impacts

Similar analyses were performed for each municipality, sanitary district and utility district within the Racine Sewer Service Area, as shown in the attached Tables. The estimated impacts are summarized in Table 30, which shows the annual increases in sewer rates, the increases in annual property tax rates, and the estimated sewer impact fees. A few words of explanation for these figures follow.

There are three sewer service providers within the Town of Caledonia: The Town of Caledonia Utility District, the North Park Sanitary District, and the Crestview Sanitary District. Because these three entities each have a different cost allocation for the WTF expansion, the sewer impact fee and increase in sewer user charges were calculated separately for each. However, since residents of all three are residents of the Town, they will all be subject to the same increase in the Town's municipal property tax rate increase.

The estimated flows for the Town of Raymond and the Town of Yorkville were combined and included as Town of Yorkville flows in the Facility Plan. Therefore, the sewer user charges and sewer impact fees for both of these Towns were computed based on the combined cost allocation and combined flows and are the same for both Towns. The revenue sharing contributions were computed separately for each municipality, however.

The City of Racine serves customers in the Village of North Bay and the Village of Elmwood Park as retail customers of the Sewer Utility; they pay the same user charge rates as City of Racine customers. For this reason, residents of these two villages will experience the same impact fees and sewer user charge increases as City of Racine residents. However, they will experience different property tax rate increases as residents of separate municipalities, and this is reflected in Table 30.

The North Park Sanitary District also serves the Village of Wind Point. Therefore, sewer customers within the Village will experience the same impact fees and increases in sewer user charges as Sanitary District customers within the Town of Caledonia. However, they will have a different property tax rate increase that reflects the Village's tax revenue sharing contributions.

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Table 1
Town of Caledonia Utility District No. 1
Wastewater Flows

Flow Type	Existing Flow (mgd) (1)	2020 Flow (mgd) ⁽¹⁾	Increased Flow (mgd) (1)	Deficiency Share 61%	Increased Flow Share 39%
Average Day	1.17	1.93	0.76		
Peak Hour	6.97	10.35	3.38	67%	33%
Current Annual F	Flow (MG)				427.1
Future Increase	in Annual Flow ((MG)			277.4
Annual Flow per Residential Equiv. Connection (REC) (MG/Year) (2)					0.132
Estimated Current RECs					3,235
Estimated Future	e Increase in RE	Cs			2,102

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 2
Town of Caledonia Utility District No. 1
Estimated RCA Charge / Impact Fee

Cost Allocation

				Deficiency	Future
WTF	Cost	Gen. Aloc ^{.(1)}	Total (2)	Share	Share
Design Average Flow (3)	\$956,924	\$421,048	\$1,377,973	\$835,351	\$542,621
Existing Peak Flow (4)	\$311,443	\$137,035	\$448,478	\$448,478	\$0
Future Increased Flow (5)	\$1,470,527	\$647,035	\$2,117,562	\$0	\$2,117,562
Total WTF	\$2,738,894	\$1,205,118	\$3,944,013	\$1,283,829	\$2,660,183
(0)					
Interceptor ⁽⁶⁾			\$3,396,504	\$1,105,608	\$2,290,896
Total Project Costs	\$2,738,894	\$1,205,118	\$7,340,517	\$2,389,437	\$4,951,080
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Fee Calculation

	Amount	%
Total Project Cost	\$7,340,517	100%
Utility User Charge Share of Cost	\$2,389,437	33%
Future Growth Share of Cost	\$4,951,080	67%
Total Annual Debt Service	\$509,441 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$343,611	
Future RECs (20 years) Future RECs Per Year	2,102 105	
Fee / REC	\$3,270	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. Caledonia U. D. #1 share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors

Table 3
Town of Caledonia Utility District No. 1
Sewer Charge Impact of New WTF Project

Annual Increase in Sewer Charges Related to New WTF Project

Project Debt Service (1)	\$509,441
Utility User Charge Share (2) Impact Fee Share (2)	\$165,830 \$343,611
Estimated Current RECs (3)	3,235
Annual Rate Impact of Debt Service per REC	\$51.26
Annual Rate Impact of New O&M per REC (4)	\$4.80
Total Annual Increase per REC	\$56.06

- 1. Caledonia U.D. #1 share of debt service from Cost of Service Allocation for the Racine WTF.
- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

Table 4 Town of Caledonia Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$334,063
Equalized Value 1998	\$1,126,898,000
Tax Rate/\$1,000 E.V.	\$0.30
Increase in Property Taxes on a \$100,000 Home	\$30.00

Revenue Sharing for Services

Library	\$333,817
Zoo	\$92,174
Museum	\$38,417
Total	\$464,409

Tax Rate/\$1,000 E.V.	\$0.41
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Increase in Property Taxes on a \$100,000 Home \$41.00

Total Property Tax Increase

Tax Rate/1,000 E.V.	\$0.71
Increase in Property Taxes on a \$100,000 Home	\$71.00

Table 5
North Park Sanitary District
Wastewater Flows

	Existing	2020	Increased	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)	Flow (mgd) (1)	Share	Flow Share
Average Day	1.70	2.64	0.94	64%	36%
Peak Hour	9.49	13.46	3.97	71%	29%
Current Annual Flow (MG)					620.5
Future Increase in Annual Flow (MG)					343.1
Annual Flow per Residential Equiv. Connection (REC) (MG/Year) (2)					0.132
Estimated Current RECs					4,701
Estimated Future	e Increase in RE	Cs			2,599

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 6
North Park Sanitary District
Estimated RCA Charge / Impact Fee

Cost Allocation

			Total	Deficiency	Future
WTF	Cost	Gen. Aloc ^{. (1)}	Cost (2)	Share	Share
Design Average Flow (3)	\$1,308,953	\$575,942	\$1,884,895	\$1,213,758	\$671,137
Existing Peak Flow (4)	\$424,045	\$186,580	\$610,625	\$610,625	\$0
Future Increased Flow (5)	\$1,601,188	\$704,525	\$2,305,713	\$0	\$2,305,713
Total WTF	\$3,334,186	\$1,467,047	\$4,801,233	\$1,824,383	\$2,976,850
(0)					
Interceptor ⁽⁶⁾			\$552,939	\$210,107	\$342,832
T. 15 : 10 :	# 0.004.400	04.407.047	ΦE 054 470	# 0.004.400	# 0.040.000
Total Project Costs	\$3,334,186	\$1,467,047	\$5,354,172	\$2,034,490	\$3,319,682

Fee Calculation

	Amount	%
Total Project Cost	\$5,354,172	100%
Utility User Charge Share of Cost	\$2,034,490	38%
Future Growth Share of Cost	\$3,319,682	62%
Total Annual Debt Service	\$361,721 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$224,274	
Future RECs (20 years) Future RECs Per Year	2,599 130	
Fee / REC	\$1,726	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. North Park share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors.

Table 7 North Park Sanitary District Sewer Charge Impact of New WTF Project

Annual Increase in Sewer Charges Related to New WTF Project

Project Debt Service (1)	\$361,721
Utility User Charge Share (2) Impact Fee Share (2)	\$137,448 \$224,274
Estimated Current RECs (3)	4,701
Annual Rate Impact of Debt Service per REC Annual Rate Impact of New O&M per REC (4)	\$29.24 \$4.80
Total Annual Increase per REC	\$34.04

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

^{1.} North Park share of debt service from Cost of Service Allocation for the Racine WTF.

Table 8
Crestview Sanitary District
Wastewater Flows

Flavy Type	Existing	2020	Increased Flow (mgd) ⁽¹⁾	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)		Share	Flow Share
Average Day	0.44	0.93	0.49	47%	53%
Peak Hour	2.86	5.25	2.39	54%	46%
Current Annual Flow (MG)					
Future Increase in Annual Flow (MG)					178.9
Annual Flow per Residential Equiv. Connection (REC) (MG/Year) (2)					0.132
Estimated Current RECs					1,217
Estimated Future Increase in RECs					1,355

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 9
Crestview Sanitary District
RCA Charge / Impact Fee

			Total	Deficiency	Future
WTF	Cost	Gen. Aloc ^{. (1)}	Cost (2)	Share	Share
Design Average Flow (3)	\$461,109	\$202,889	\$663,997	\$314,149	\$349,848
Existing Peak Flow (4)	\$127,794	\$56,230	\$184,024	\$184,024	\$0
Future Increased Flow (5)	\$939,174	\$413,238	\$1,352,413	\$0	\$1,352,413
Total WTF	\$1,528,077	\$672,357	\$2,200,434	\$498,173	\$1,702,261
Interceptor (6)			\$159,362	\$36,079	\$123,282
Total Project Costs	\$1,528,077	\$672,357	\$2,359,795	\$534,252	\$1,825,543

	Amount	%
Total Project Cost	\$2,359,795	100%
Utility User Charge Share of Cost	\$534,252	23%
Future Growth Share of Cost	\$1,825,543	77%
Total Annual Debt Service	\$158,993 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$122,997	
Future RECs (20 years) Future RECs Per Year	1,355 68	
Fee/REC	\$1,816	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. Crestview share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors.

Table 10 Crestview Sanitary District Sewer Charge Impact of New WTF Project

Project Debt Service (1)	\$158,993
Utility User Charge Share (2) Impact Fee Share (2)	\$35,996 \$122,997
Estimated Current RECs (3)	1,217
Annual Rate Impact of Debt Service per REC	\$29.59
Annual Rate Impact of New O&M per REC (4)	\$4.80
Total Annual Increase per REC	\$34.39

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

^{1.} Crestview share of debt service from Cost of Service Allocation for the Racine WTF.

Table 11
Town of Mount Pleasant
Wastewater Flows

	Existing	2020	Increased	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)	Flow (mgd) (1)	Share	Flow Share
Average Day	4.71	10.21	5.5	46%	54%
Peak Hour	44.34	83.15	38.81	53%	47%
Current Annual	1720.4				
Future Increase in Annual Flow (MG)					2007.5
Annual Flow per Residential Equiv. Connection (REC) (MG/Year) (2)					0.132
Estimated Current RECs					13,033
Estimated Future Increase in RECs					15,208

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 12 Town of Mt. Pleasant RCA Charge / Impact Fee

				Deficiency	Future
WTF	Cost	Gen. Aloc ^{.(1)}	Total (2)	Share	Share
Design Average Flow (3)	\$5,063,958	\$2,228,150	\$7,292,108	\$3,365,243	\$3,926,865
Existing Peak Flow (4)	\$1,981,078	\$871,678	\$2,852,755	\$2,852,755	\$0
Future Increased Flow (5)	\$14,315,076	\$6,298,657	\$20,613,734	\$0	\$20,613,734
Total WTF	\$21,360,112	\$9,398,485	\$30,758,597	\$6,217,998	\$24,540,599
50					
Interceptor ⁽⁶⁾			\$2,700,022	\$540,004	\$2,160,018
T. 15 1 . 6 .	***	* • • • • • • • • • • • • • • • • • • •	*	*	*
Total Project Costs	\$21,360,112	\$9,398,485	\$33,458,619	\$6,758,002	\$26,700,616

	Amount	%
Total Project Cost	\$33,458,619	100%
Utility User Charge Share of Cost	\$6,758,002	20%
Future Growth Share of Cost	\$26,700,616	80%
Total Annual Debt Service	\$2,256,552 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$1,800,772	
Future RECs (20 years) Future RECs Per Year	15,208 760	
Fee/REC	\$2,368	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. Mount Pleasant share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation.

 Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors

Table 13 Town of Mt. Pleasant Sewer Charge Impact of New WTF Project

Project Debt Service (1)	\$2,256,552
Utility User Charge Share (2) Impact Fee Share (2)	\$455,780 \$1,800,772
Estimated Current RECs (3)	13,033
Annual Rate Impact of Debt Service per REC Annual Rate Impact of New O&M per REC (4)	\$34.97 \$4.80
Total Annual Increase per REC	\$39.77

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.89/MG.

^{1.} Mt. Pleasant share of debt service from Cost of Service Allocation for the Racine WTF.

Table 14 Town of Mt. Pleasant Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$1,074,141
Equalized Value 1998	\$1,340,313,000
Tax Rate/\$1,000 E.V.	\$0.80
Increase in Property Taxes on a \$100,000 Home	\$80.00

Revenue Sharing for Services

Library	\$280,736
Zoo	\$109,631
Museum	\$45,693
Total	\$436,059
Tax Rate/\$1,000 E.V.	\$0.33
Increase in Property Taxes on a \$100,000 Home	\$33.00
Total Branarty Tay Increase	

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$1.13
Increase in Property Taxes on a \$100,000 Home	\$113.00

Table 15 Town of Raymond Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$63,216
Equalized Value 1998	\$225,155,000
Tax Rate/\$1,000 E.V.	\$0.28
Increase in Property Taxes on a \$100,000 Home	\$28.00

Revenue Sharing for Services

Library	\$15,317
Zoo	\$18,417
Museum	\$7,676
Total	\$41,409

Tax Rate/\$1,000 E.V. \$0.18

Increase in Property Taxes on a \$100,000 Home \$18.00

Total Property Tax Increase

Tax Rate/1,000 E.V. \$0.46

Increase in Property Taxes on a \$100,000 Home \$46.00

Table 16
Town of Yorkville ⁽³⁾
Wastewater Flows

	Existing	2020	Increased	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)	Flow (mgd) (1)	Share	Flow Share
Average Day	0.03	0.91	0.88	3%	97%
Peak Hour	0.16	3.89	3.73	4%	96%
Current Annual F	Flow (MG) (4)				11.0
Future Increase in Annual Flow (MG)					321.2
Annual Flow per Residential Equiv. Connection (REC) (MG/Year) (2)				0.132	
Estimated Curre	nt RECs ⁽⁴⁾				83
Estimated Future Increase in RECs				2,433	

- 1. From 1998 Facility Plan.
- 2. Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)
- 3. Includes Town of Raymond flows.
- 4. Estimated flows from existing development. There are no customers connected the sewer system at the present time.

Table 17
Town of Yorkville / Town of Raymond
RCA Charge / Impact Fee

			Total	Deficiency	Future
WTF	Cost	Gen. Aloc ^{. (1)}	Cost (2)	Share	Share
Design Average Flow (3)	\$451,192	\$198,525	\$649,718	\$21,419	\$628,298
Existing Peak Flow (4)	\$7,149	\$3,146	\$10,295	\$10,295	\$0
Future Increased Flow (5)	\$1,482,679	\$652,381	\$2,135,060	\$0	\$2,135,060
Total WTF	\$1,941,021	\$854,052	\$2,795,073	\$31,714	\$2,763,359
Interceptor ⁽⁶⁾			\$248,711	\$2,822	\$245,889
Total Project Costs	\$1,941,021	\$854,052	\$3,043,784	\$34,536	\$3,009,247

	Amount	%
Total Project Cost	\$3,043,784	100%
Utility User Charge Share of Cost	\$34,536	1%
Future Growth Share of Cost	\$3,009,247	99%
Total Annual Debt Service	\$205,298 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$202,969	
Future RECs (20 years) Future RECs Per Year	2,433 122	
Fee / REC	\$1,668	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. Yorkville and Raymond share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors.

Table 18 Town of Yorkville / Town of Raymond Sewer Charge Impact of New WTF Project

Project Debt Service (1)	\$205,298
Utility User Charge Share (2) Impact Fee Share (2)	\$2,329 \$202,969
Estimated Current RECs (3)	83
Annual Rate Impact of Debt Service per REC Annual Rate Impact of New O&M per REC (4)	\$28.08 \$4.80
Total Annual Increase per REC	\$32.88

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

^{1.} Yorkville share of debt service from Cost of Service Allocation for the Racine WTF.

Table 19 **Town of Yorkville Impact of Revenue Sharing Plans**

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$85,581
Equalized Value 1998	\$231,288,000
Tax Rate/\$1,000 E.V.	\$0.37
Increase in Property Taxes on a \$100,000 Home	\$37.00

Revenue Sharing for Services

Library	\$8,727
Zoo	\$18,918
Museum	\$7,885
Total	\$35,530

\$0.15

Increase in Property Taxes on a \$100,000 Home \$15.00

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$0.52
Increase in Property Taxes on a \$100,000 Home	\$52.00

Table 20
Racine, Elmwood Park and North Bay
Wastewater Flows

	Existing	2020	Increased	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)	Flow (mgd) (1)	Share	Flow Share
Average Day	16.32	17.06	0.74	96%	4%
Peak Hour	105.54	109.12	3.58	97%	3%
Current Annual	Flow (MC)				E0E6 0
Current Annual	` '				5956.8
Future Increase in Annual Flow (MG)					270.1
Annual Flow per	Residential Equ	iv. Connection	(REC) (MG/Yea	ır) ⁽²⁾	0.132
Estimated Curre	nt RECs				45,127
Estimated Future	e Increase in RE	Cs			2,046

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 21
Racine, Elmwood Park and North Bay
RCA Charge / Impact Fee

			Total	Deficiency	Future
WTF	Cost	Gen. Aloc ^{. (1)}	Cost (2)	Share	Share
Design Average Flow (3)	\$8,456,937	\$3,721,066	\$12,178,003	\$11,649,766	\$528,237
Existing Peak Flow (4)	\$4,716,057	\$2,075,073	\$6,791,130	\$6,791,130	\$0
Future Increased Flow (5)	\$1,466,385	\$645,212	\$2,111,596	\$0	\$2,111,596
Total WTF	\$14,639,378	\$6,441,351	\$21,080,729	\$18,440,896	\$2,639,833
Interceptor ⁽⁶⁾			\$842,882	\$737,333	\$105,550
	.	^		^	
Total Project Costs	\$14,639,378	\$6,441,351	\$21,923,612	\$19,178,228	\$2,745,383

	Amount	%
Total Project Cost	\$21,923,612	100%
Utility User Charge Share of Cost	\$19,178,228	87%
Future Growth Share of Cost	\$2,745,383	13%
Total Annual Debt Service	\$1,473,847 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$184,562	
Future RECs (20 years) Future RECs Per Year	2,046 102	
Fee/REC	\$1,804	

- 1. Includes pro rata share of general construction, contingency, engineering, administrative and legal costs.
- 2. Racine share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors.

Table 22
Racine, Elmwood Park and North Bay
Sewer Charge Impact of New WTF Project

Project Debt Service (1)	\$1,473,847
Utility User Charge Share (2) Impact Fee Share (2)	\$1,289,285 \$184,562
Estimated Current RECs (3)	45,127
Annual Rate Impact of Debt Service per REC	\$28.57
Annual Rate Impact of New O&M per REC (4)	\$4.80
Total Annual Increase per REC	\$33.37

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

^{1.} Racine share of debt service from Cost of Service Allocation for the Racine WTF.

Table 23
Village of Elmwood Park
Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$7,936
Equalized Value 1998	\$30,039,600
Tax Rate/\$1,000 E.V.	\$0.26
Increase in Property Taxes on a \$100,000 Home	\$26.00

Revenue Sharing for Services

Library Zoo	\$9,820 \$2,667
Museum	\$1,111
Total	\$13,598

Tax Rate/\$1,000 E.V. \$0.45

Increase in Property Taxes on a \$100,000 Home \$45.00

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$0.71
Increase in Property Taxes on a \$100,000 Home	\$71.00

Table 24 Village of North Bay Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$22,766
Equalized Value 1998	\$22,390,200
Tax Rate/\$1,000 E.V.	\$1.02
Increase in Property Taxes on a \$100,000 Home	\$102.00

Revenue Sharing for Services

Library	\$7,397
Zoo	\$1,988
Museum	\$828
Total	\$10,213

Tax Rate/\$1,000 E.V.	\$0.46
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Increase in Property Taxes on a \$100,000 Home \$46.00

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$1.48

Increase in Property Taxes on a \$100,000 Home \$148.00

Table 25
Village of Sturtevant
Wastewater Flows

	Existing	2020	Increased	Deficiency	Increased
Flow Type	Flow (mgd) (1)	Flow (mgd) (1)	Flow (mgd) (1)	Share	Flow Share
Average Day	0.71	0.81	0.1	88%	12%
Peak Hour	5.09	5.65	0.56	90%	10%
Current Annual	Flow (MG)				259.2
Future Increase	in Annual Flow ((MG)			36.5
Annual Flow pe	r Residential Equ	iv. Connection	(REC) (MG/Yea	ar) ⁽²⁾	0.132
Estimated Curre	ent RECs				1,963
Estimated Futur	e Increase in RE	Cs			277

^{1.} From 1998 Facility Plan.

^{2.} Estimated REC including I/I is 132,000 gallons per year (70,000 gallons plus 47% I/I)

Table 26 Village of Sturtevant RCA Charge / Impact Fee

			Total	Deficiency	Future
WTF	Cost	Gen. Aloc ^{. (1)}	Cost (2)	Share	Share
Design Average Flow (3)	\$401,611	\$176,709	\$578,320	\$506,923	\$71,398
Existing Peak Flow (4)	\$227,438	\$100,073	\$327,511	\$327,511	\$0
Future Increased Flow (5)	\$300,921	\$132,406	\$433,327	\$0	\$433,327
Total WTF	\$929,970	\$409,188	\$1,339,158	\$834,434	\$504,724
Interceptor (6)			\$37,340	\$23,267	\$14,073
Total Project Costs	\$929,970	\$409,188	\$1,376,498	\$857,700	\$518,798

	Amount	%
Total Project Cost	\$1,376,498	100%
Utility User Charge Share of Cost	\$857,700	62%
Future Growth Share of Cost	\$518,798	38%
Total Annual Debt Service	\$92,457 ⁽⁷⁾	
Growth Share of Annual Debt Service	\$34,847	
Future RECs (20 years) Future RECs Per Year	277 14	
Fee / REC	\$2,520	

- 1. Includes pro rata share of general construction, contingency, engineering, adminstrative and legal costs.
- 2. Sturtevant share of project cost per Cost of Service Allocation for the Racine WTF.
- 3. Includes cost of facilities allocated on basis of design average flow in the Cost of Service Allocation. Deficiency share based upon average day existing flow share of total design average day flows.
- 4. Includes cost of facilities allocated on basis of existing peak flow in the Cost of Service Allocation.
- 5. Includes cost of facilities allocated on basis of increased flow in the Cost of Service Allocation.
- 6. Interceptor cost allocated on basis of overall average deficiency-future share for WTF.
- 7. Assumes Clean Water Fund financing for 20 years at 2.97% for the WTF and 3.78% for the interceptors.

Table 27 Village of Sturtevant Sewer Charge Impact of New WTF Project

Project Debt Service (1)	\$92,457
Utility User Charge Share (2) Impact Fee Share (2)	\$57,610 \$34,847
Estimated Current RECs (3)	1,963
Annual Rate Impact of Debt Service per REC	\$29.34
Annual Rate Impact of New O&M per REC (4)	\$4.80
Total Annual Increase per REC	\$34.15

- 2. From RCA Charge / Impact Fee worksheet.
- 3. Based on 132,000 gallons per year per REC.
- 4. WTF expansion will result in increased O&M costs of \$333,000 per year. Rate impact will be \$36.39/MG.

^{1.} Sturtevant share of debt service from Cost of Service Allocation for the Racine WTF.

Table 28 Village of Sturtevant Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$139,692
Equalized Value 1998	\$199,790,800
Tax Rate/\$1,000 E.V.	\$0.70
Increase in Property Taxes on a \$100,000 Home	\$70.00

Revenue Sharing for Services

Library	\$40,913
Zoo	\$17,736
Museum	\$7,392
Total	\$66,041

Tax Rate/\$1,000 E.V.	\$0.33

Increase in Property Taxes on a \$100,000 Home \$33.00

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$1.03

Increase in Property Taxes on a \$100,000 Home \$103.00

Table 29 Village of Wind Point Impact of Revenue Sharing Plans

Tax Base Revenue Sharing

Total Revenue Sharing Contribution	\$132,308
Equalized Value 1998	\$171,348,200
Tax Rate/\$1,000 E.V.	\$0.77
Increase in Property Taxes on a \$100,000 Home	\$77.00

Revenue Sharing for Services

Library	\$43,607
Zoo	\$14,015
Museum	\$5,841
Total	\$63,464

Tax Rate/\$1,000 E.V.	\$0.37
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Increase in Property Taxes on a \$100,000 Home \$37.00

Total Property Tax Increase

Tax Rate/\$1,000 E.V.	\$1.14

Increase in Property Taxes on a \$100,000 Home \$114.00

Table 30
Community Impacts of Cost Sharing for Racine WTF Expansion and Upgrade and Revenue Sharing ⁽¹⁾

	То	wn of Caledo	nia							Village of Wind Point	
Eviatina Cinala Family Hama	Caledonia U. D.	North Park S.D.	Crestview S. D.	Town of Mt. Pleasant	Town of Raymond	Town of Yorkville	Village of Elmwood Park	Village of North Bay	Village of Sturtevant	North Park S.D.	City of Racine
Existing Single Family Home											
Annual Increase in Sewer Charges	\$56.06	\$34.04	\$34.39	\$39.77	\$32.88	\$32.88	\$33.37	\$33.37	\$32.88	\$34.04	\$33.37
Annual Property Tax Increase (2)	\$70.00	\$70.00	\$70.00	\$113.00	\$62.00	\$60.00	\$71.00	\$148.00	\$60.00	\$114.00	\$0.00
Total Annual Increase Total Monthly Increase	\$126.06 \$10.51	\$104.04 \$8.67	\$104.39 \$8.70	\$152.77 \$12.73	\$94.88 \$7.91	\$92.88 \$7.74	\$104.37 \$8.70	\$181.37 \$15.11	\$92.88 \$7.74	\$148.04 \$12.34	\$33.37 \$2.78
Future Development											
RCA Charge/Impact Fee Per REC	\$3,270	\$1,726	\$1,816	\$2,368	\$1,668	\$1,668	\$1,804	\$1,804	\$1,668	\$1,726	\$1,804

^{1.} Based upon 1998 data and original facility plan cost estimates.

^{2.} Annual tax increase for \$100,000 home.

APPENDIX 13 ANNOTATED BIBILOGRAPHY

ANNOTATED BIBLIOGRAPHY

- A. Fiscal Inequities Between Central Cities and Suburbs
 - 1. "The Suburban Exploitation Thesis: Should the Burden of Proof Be Shifted?" Brett W. Hawkins and Douglas M. Irhke, University of Wisconsin Milwaukee. The authors review 17 studies of the relationship between cities and suburbs to determine whether suburbs impose more burdens than benefits on cities, or whether the cities in fact receive a net benefit from their suburbs. When studies examine benefits from a variety of sources, the majority find that suburbs benefit cities, or at least do not harm them. Of the 17 studies, 8 found more benefits to cities than costs, 2 found that the benefits to cities offset the costs, and 5 found more costs than benefits.
 - 2. "Ties That Bind: Central Cities, Suburbs and the New Metropolitan Region", H.V. Savitch, David Collins, Daniel Sanders and John P. Markham, *Economic Development Quarterly*, Vol. 7, No. 4, 341-357 (November 1993). This study suggests that central cities and their surrounding regions are highly interdependent, and that neither suburbs nor central cities are self-sufficient. It found strong statistical evidence that suburbs benefit when their core cities are viable and that when cities include a greater proportion of their metropolitan populations, they tend to be more prosperous. Suburbs that surround cities that are poor and in the process of de-densification are vulnerable to long-term attrition.
 - 3. "City-Suburban Differentials in Local Government Fiscal Effort", Woo Sik Kee, *National Tax Journal*, Vol. 21: 183-189 (1968). This article examines the proportion of locally received income allocated to the public sector. The author first compares local government expenditures and fiscal effort between 22 core cities and their suburbs. A regression analysis is used to explain observed city-suburban differentials in local government fiscal effort. The author finds that one of the major causes of the difference in fiscal effort between core cities and suburbs is the heavy public welfare, health and other related service demands made by the city's poor and the disadvantaged. Among his conclusions: to the extent that heavy demands for non-aided local expenditures are in part caused by the use of core city services by a non-resident population, the institution of some form of user charges may be an equitable means of coping with the core city fiscal difficulties.
 - 4. "Suburban Population Growth and Its Implications for Core City Finance", Woo Sik Kee, Land Economics, Vol. 43: 202-211 (1967). The author notes that there is much evidence that the decline in per capita taxable property values in central cities of major metropolitan areas have left the core cities with inadequate revenues to address their budgetary needs. The author also presents the hypothesis that a rapid growth in suburban population exerts fiscal pressure on the expenditure side of the core city budget. Many core cities provide the suburban population with various public facilities and services. The author, through a regression analysis, examines the SMSA's with populations of one million or more in 1960 to test the hypothesis that per capita expenditures of the core cities increase as the percentage of the metropolitan population residing outside the core cities increases. He concludes that the suburban and commuter population growth results in central cities needing higher expenditures while at the same time being able to raise less revenue.

- 5. "Suburban-Central City Exploitation Thesis: One City's Tale", W. Neenan, *National Tax Journal*, Vol. 23, No. 2 (June 1970). This article examines the benefits and revenue flows in the Detroit SMSA. The author states that cities provide the following benefits to suburbs: 1) direct benefits such as libraries, museums, zoos, recreational facilities and parks, street and traffic control; and 2) indirect benefits such as utility subsidies and a location for tax exempt properties such as hospitals and schools. In addition, the cities bear a major share of the cost of regional poverty. He concludes that there is evidence that the suburbs in varying degrees are enjoying net benefits from the city.
- 6. "Most Cities Face Double Taxation" Edward Huck, Wisconsin Alliance of Cities, Wisconsin State Journal December 8, 1998. Huck argues that cities face double taxation by paying county taxes for certain types of services that are provided by their own municipality. He cites Green Bay and Oshkosh efforts to estimate the "double whammy" effect (see Green Bay and Oshkosh references).
- 7. City of Green Bay Memo, May 5, 1997 The City claims that its taxpayers are paying approximately \$3.6 million per year for Sheriff Department services that do not benefit City residents.
- 8. City of Oshkosh Memo, March 26, 1996 The City manager claims that its taxpayers are paying for county level services for which they receive no benefit. The City claims that it is in effect subsidizing growth outside its limits and promoting urban sprawl. He cites that the State recently mandated that county health departments should be funded by communities that do not provide their own health department. The City makes a case that the county Sheriff Department budget should be handled the same way. By using services subsidized by cities, towns such as the Town of Algoma, can keep their taxes low and attract new development. An analysis is presented which shows that a fair sharing of county sheriff and detective costs would result in an increase in tax rates for the towns and lower tax rates for the cities.
- 9. City of Madison Memo, August 27,1990 The City argues that it pays for County Sheriff Department services that benefit county residents but not city residents. This results in approximately \$5.2 million additional cost to city taxpayers annually.
- 10. "Cost Analysis of Selected Waukesha County Sheriffs Department Services", Waukesha County Municipal Executives Association (1991). This study had two objectives: 1. to determine the full cost (including indirect costs and overhead) of Sheriff's Department dispatch services and contracted patrol and investigation services; and 2. to determine if property taxpayers in cities and villages were paying twice for services which their municipality provides and in effect subsidizing services to the towns. The study found that communities that had their own police departments were subsidizing those that don't through county property taxes.

B. TAX REVENUE SHARING, TAX BASE SHARING AND FISCAL EQUALIZATION

1. "Metropolitan Fiscal Equalization: Distilling Lessons from Four U.S. Programs", Samuel Nunn and Mark S. Rosentraub, *State and Local Government Review*, Vol. 28, No. 2: 90-102 (Spring 1996). The authors examine metropolitan regions in the United States that have experimented with fiscal equalization programs. The oldest program, in the Twin Cities metropolitan area, provides for sharing the

property tax base. Other programs that include tax base and tax revenue sharing exist in Dayton-Montgomery County, Ohio; Louisville-Jefferson County, Kentucky, and the Meadowlands region of New Jersey. This article presents an overview and analysis of these four metropolitan fiscal equalization efforts and offers practical suggestions for other areas seeking to implement such programs.

The intent of fiscal equalization programs is to equalize fiscal capacity by transferring revenues from wealthier communities to poorer ones. The existing programs have sometimes had unintended effects. For example, the City of Minneapolis, which experienced an economic boom, ended up being a contributor instead of a recipient in the Twin Cities tax base sharing program even though its fiscal capacity was still lower than those of its suburbs. The City of Dayton, although poorer than its suburbs, also ended up at times as a contributor.

- 2. "Revenue Sharing and Urban Growth Agreements in the Denver Area", Richard Sheehan, *Government Finance Review*: 25-30 (April 1998). This article describes a number of tax revenue sharing programs and intergovernmental agreements set up between various municipalities in the Denver area. The author details the 1995 attempt to set up a regional sales tax sharing arrangement in the Boulder area. This attempt was abandoned in 1997 because of the political climate and the inability to achieve consensus. The suburban communities of Louisville, Superior, Westminster, and Thornton entered into intergovernmental agreements to share sales tax revenue. A major benefit of these agreements was that they ended the practice of annexing new territory for the purpose of gaining sales tax revenue.
- 3. "Regional Tax base Sharing: An Analysis and Simulation of Alternative Approaches." Peter Fisher, *Land Economics* 1982 The notion of reducing fiscal disparities among local units of government by redistributing effective local tax base has been around since the 1950's. The objectives of tax base sharing are as follows: 1) enhance equity among communities by equalizing the tax burden required to finance a given level of services; and 2) promoting greater efficiency in the location of economic activity. Tax base sharing can reduce competition among neighboring communities for the location of certain types of development. This study looks at the Twin Cities program and cites fundamental problems with the plan. The author examines and presents the effects of the Minnesota plan and alternative formulas through a series of simulations performed for municipalities in the Milwaukee Metropolitan area. The author also looks at fiscal equalization on a state wide basis.
- 4. "Regional Tax Base Sharing: Possibilities and Implications", Roy Bahl and David Puryear, *National Tax Journal*, Vol. 29, 328-335 (September 1976). This article focuses on the efficiency and equity implications of regional financing. The authors conclude that regional financing plans may be ineffective in curing the problems of central cities.
- 5. "Tax Base Sharing: An Assessment of the Minnesota Experience", Andrew Reschovsky and Eugene Knaff, *Journal of the American Institute of Planners*, 43: 361-369 (October 1977). The authors describe and assess the tax base sharing program in the Twin Cities region. The Minnesota legislature enacted tax base sharing legislation in 1971 designed to share a proportion of all commercial and industrial growth occurring within the Minneapolis St. Paul area among all local governments in the metropolitan area. The authors suggest that in the long run the program's reduction in fiscal disparities will lead to a more efficient

- development pattern only if used in conjunction with growth management that directs growth to the most infrastructure-efficient areas.
- 6. "Tax Base-Sharing: A Fiscal Aid Towards More Rational Land Use Planning", Lyall, K., *Journal of the American Institute of Planners Vol.* 41: 90-100 (March 1975). The author describes tax-base sharing as an area-wide sharing of increases in property tax base. The sharing of tax revenues to be obtained from new development reduces inter-jurisdictional competition for new development. With the need for competition for development between jurisdictions obviated, more rational development patterns, open space protection and infrastructure provision can result. The author also describes methodologies employed to determine contributions and distributions from a tax base sharing program.
- 7. "An Evaluation of Metropolitan Area Tax Base Sharing", Andrew Reschovsky, *National Tax Journal*, Vol. 33: 55-66 (March 1980). In this article, the author evaluates the claims that tax-base sharing will reduce metropolitan area fiscal disparities, help alleviate the fiscal problems of central cities and stimulate a more efficient pattern of land use. Utilizing data from the Twin Cities plan, the author concludes that the Twin Cities plan is moderately successful in reducing inequities but finds little evidence that it can produce more efficient patterns of economic development.
- 8. "Property Tax Base Sharing: An Answer to Central City Fiscal Problems", D. A. Gilbert, *Social Science Quarterly*, Vol. 58, No. 4 (March 1971). This paper examines property tax base revenue sharing as a solution to central city fiscal problems. Gilbert looks at the Twin Cities model as it would apply to other areas. Although tax base revenue sharing would bring additional revenue to central cities, he argues that it would not be sufficient to solve the serious problems they face. He suggests that a different tax base such as regional income tax might be in order and that financial responsibilities for welfare type items should be shifted away from the central cities.
- 9. State of Minnesota Minnesota Fiscal Disparities Act The Minnesota Fiscal Disparities Act, which was passed by the state legislature in 1973, required localities within the Twin Cities metropolitan area to contribute a portion of the local growth in commercial and industrial tax base to a metropolitan pool which is then redistributed. Each community in the area contributes 40% of its commercial /industrial tax base growth since 1971 into a metropolitan pool which is the redistributed in inverse proportion to local per capita property values. This was the nation's first program for sharing of property tax bases in a metro area.
- 10. "State Equalization aids and Metropolitan Tax Base Sharing: A Comparative Analysis" Peter Fisher, *Public Finance Quarterly* 1981. This study examines state grant programs aimed at equalizing local government fiscal capacities and compares them to metropolitan programs for sharing tax bases. The programs have similar objectives. The study looks at the Twin Cities model (see Minnesota Fiscal Disparities Act) and points out deficiencies in the methodology. Alternative formulas were evaluated and the merits of tax base sharing at the state rather than metropolitan level are discussed.

C. REGIONAL GOVERNANCE AND METROPOLITAN PLANNING

1. "Political Support for Regional Government in the 1990s: Growing in the Suburbs?" Larry N. Gerston and Peter Hass, *Urban Affairs Quarterly* 29, 1: 154-

- 163 (1993). The authors present the results of a survey of likely voters in suburban Santa Clara County, California and find widespread support for regional government. There were no significant differences between demographic subgroups in their support for regional government. The authors link this show of support for regional government to residents' perceptions that urban problems in the County, such as pollution and congestion, are increasing.
- 2. "North American Metropolitan Planning: Canadian and U.S. Perspectives," Donald N. Rothblatt, Journal of the American Planning Association, Vol. 60, No. 4, (Autumn 1994). This article presents the results of a comparative study of Canadian and American metropolitan planning and management systems in Toronto, Chicago, Montreal, Boston, Vancouver, San Francisco Bay Area, Edmonton, Houston, and the Twin Cities. The study confirms that the Canadian metropolitan areas generally have more highly developed regional governance systems. However, there is evidence that the Canadian metropolitan governing agencies are increasingly less able to keep up with the pace of urban and suburban growth and not always able to overcome local governmental fragmentation. At the same time, it appears that the American metropolitan areas are making development decisions on an increasingly regional level. The authors attribute this to the problems associated with increased development, such as pollution and congestion, which are spreading beyond political boundaries. In sum, the governance and development patterns of these Canadian and American metropolitan counterparts appear to be converging.

The authors also note that regional revenue sharing programs are not common. In fact, of the cities surveyed, only Toronto, Montreal and the Twin Cities have fully-functioning revenue sharing programs.

- 3. "Saving 'No' One More Time: The Rejection of Consolidated Government in Knox County, Tennessee", William Lyons and John M. Scheb II, State and Local Government Review, Vol. 30, No. 2: 92-105 (Spring 1998)". This article explains the failure of the Knoxville - Knox County Consolidation referendum of 1996 and discusses implications for future metropolitan consolidation efforts. Using quantitative and qualitative data gathered from surveys and focus groups, the authors address two questions: 1) why community leaders have been so persistent in pushing for City - County consolidation; and 2) why the County voters outside the City have consistently rejected the consolidation. The authors found that those most in favor of the consolidation were the City's downtown business associations who believed it would enhance the economic development of the central city and the region as a whole. Business people pointed to the success of the Nashville - Davidson County consolidation. Those who most opposed it were the residents of the more rural areas of the County who had a great antipathy to the central city and its business elite and also feared higher taxes.
- 4. "Metropolitan Organization and Governance, A Local Public Economy Approach", Roger B. Parks and Ronald J. Oakerson, *Urban Affairs Quarterly*, Vol. 25, No. 1: 18-29 (September 1989). This highly theoretical article considers the following questions: 1) what patterns of public organization are more likely to be responsive to citizen preferences, efficient in the way services are produced and equitable in the way services are financed and delivered; and 2) what patterns of governance are more likely to enable individuals to establish and maintain such patterns of organization in view of changing preferences, technologies, and other circumstances of metropolitan life. The author notes that some researchers have shown that more fragmented metropolitan areas tend to be more efficient.

5. Dimensions of Interjurisdictional Cooperation, Samuel Nunn and Mark S. Rosentraub, *Journal of the American Planning Association*, Vol. 63, No. 2: 205-219 (Spring 1997). This article is a survey of the evolution and range of organized interjurisdictional cooperation effort between local governments with specific examples from the Denver (Metro Denver Network), Pittsburgh (Allegheny Conference for Community Development), Toledo (Toledo Metropolitan Area Council of Governments), Louisville (Louisville-Jefferson County Compact) and Portland (Portland Metropolitan Service District) metropolitan areas. It examines different approaches to interjurisdictional cooperation and discusses benefits resulting from such cooperation.

D. OTHER

- 1. "An Analysis of the State of Wisconsin's Shared Revenue Program: A Report Submitted to the Department of Revenue, State of Wisconsin", Richard Green of the Center for Urban Land Economics Research, School of Business, University of Wisconsin-Madison and Andrew Reschovsky of the LaFollete Institute of Public Affairs, Department of Agricultural Economics, University of Wisconsin-Madison (November 16, 1992). This is a 100-page study, commissioned by the Wisconsin Department of Revenue, on the State of Wisconsin's shared tax revenue formula and program with its local governments. The Wisconsin program is designed to help equalize the ability of local governments to provide public services. The authors have constructed a measure of the fiscal condition of municipal governments in Wisconsin that reflects both their expenditure need and their revenue-raising capacity.
- 2. "Financing Programs for Local Government Agencies: A Regional Approach," Dari Barzel, *Government Finance Review* 4, 4: 7-12 (1988). This article describes how lease financing and certificates of participation have enabled the Association of Bay Area Governments (ABAG) in California to provide pooled debt issuance for local governments throughout the region. These newer methods of raising funds occurred in response to the California legislature's passage of Proposition 13 and the resulting tax caps. ABAG aggregates member municipalities' requests for financing, issues certificates of participation and distributes the funds to pool participants. These pools are then used to finance a variety of public projects such as municipal building expansions, street improvements, computer system updates, and equipment and vehicle purchases.
- 3. "Metropolitan Taxation in the 21ST Century", David Brunori, *National Tax Journal*, Volume 51, No. 3: 541-551 (September 1998). This essay discusses the future of existing local tax systems, the likely limitations that will be placed on those systems, and the effects of those limitations on metropolitan government. The author predicts that metropolitan governments will seriously consider the adoption of some form of land value taxation such as perhaps split rate systems in which land is taxed at a higher rate than improvements.
- 4. "Paying for New Development: The Urban Structure Program of the City of Lancaster", Gary G. Hill, *Government Finance Review*, 7-10 (June 1997). This article describes and evaluates the imposition of a distance surcharge that the City of Lancaster, California incorporated into the calculation of development impact fees for the provision of certain services. The author notes that the surcharge has served as an economic incentive for developers to locate projects within the City's urban core and closer to existing development. As well, since the costs of providing infrastructure increase with distance, the surcharge provides a more

- equitable way of paying for infrastructure and services provided to new development.
- 5. "Trends in Special Districts", G. Ross Stephens and Nelson Wikstrom, *State and Local Government Review*, Vol. 30, No. 2: 129-138 (Spring 1998). This article begins with a discussion of recent trends in special district government based on data reported for 1992 by the U.S. Bureau of the Census. The authors then analyze the relative importance of special district government in each state and the functional orientation of special district government. They conclude with commentary on the virtues and pitfalls of special districts. The main advantage of special districts is that they can overcome jurisdictional boundaries and allow for regional provision of services such as fire protection and sewer service. The main disadvantage is that special service districts compound the level of governmental fragmentation.
- 6. "Town of Dunn Cost of Community Services by Land Use", 1994. Taken from the Town of Dunn Home Page. This study shows the breakdown of revenues and expenses for 1993 by land use type, demonstrating that the Town spent \$1.06 to provide services for every \$1 of revenue from residential uses, but spent only \$0.29 for every commercial revenue dollar and \$0.18 for every dollar of revenue from agriculture/forest/open space land. The study includes a detailed list of revenues and expenses for each type of land use and a description of the method used to allocate each category of revenue or expense.
- 7. "A Three-city Venture for Wastewater Utility Service", Catherine A. Hill and Nancy Gleason, *Government Finance Review*: 40-41 (August 1997). In the early 1990's, the Miami Conservancy District in metropolitan Dayton, Ohio, transferred ownership of its North Regional wastewater treatment facility to three cities in the area so that the agency could concentrate on its primary mission of flood control. The three cities then formed a partnership called Tri-Cities North Regional Wastewater Authority to assume joint ownership of the facility.
- 8. "The Economic Value of Open Space", Charles J. Fausold and Robert J. Lilliehom, *Land Lines*, Vol. 8, No. 5 (September 1996). This article discusses means of determining the economic value of open space. The authors conclude that measuring the economic value of open space will always be difficult because so much of what constitutes its value is intangible. They also discuss the ability of different types of development to finance the services they demand and note conclusions from a study by Robert Burchell and David Listokin: 1) generally residential development does not pay its own way; and 2) nonresidential development does pay for itself but is a magnet for residential development. As well, a study of 11 towns in the Southern New England Forest Consortium shows that on a strictly financial basis the cost of providing public services is more than twice as high for residential development as for commercial development or open space.
- 9. "Local Government Fragmentation: Does it Drive Up the Cost of Government?" Drew A. Dolan, *Urban Affairs Quarterly* 26, 1: 28-45 (1990). In this article, the author provides empirical evidence, from the Chicago area, that fragmentation of local governments, measured in part by the dispersion of expenditures among local governments, does drive up the cost of government. He notes that heretofore many of the arguments contending that local government fragmentation drives up the cost of government were based primarily on political ideologies and impressions rather than on empirical data.

10. "The State vs. Sprawl", *Governing*, January, 1999 p.18-23. Discusses Maryland's new comprehensive growth management policy, called "Smart Growth and Neighborhood Revitalization." The mainstays of the policy are the Rural Legacy Program, which provides funds for protection of undeveloped and agricultural land, and Priority Funding Areas, which are areas in which the state will contribute funds for infrastructure. The idea is to revitalize older communities and discourage growth in undeveloped areas by limiting the places where urban services will be provided.