

# ECONOMIC AND FINANCIAL CONDITION OF FOUR ROUGE RIVER COMMUNITIES

RPO-NPS-SR24.00

Prepared for  
Wayne County  
Rouge River National Wet Weather Demonstration Project  
Rouge Program Office

by

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Sept. 2, 1997

## ECONOMIC AND FINANCIAL CONDITION OF FOUR ROUGE RIVER COMMUNITIES

Public Sector Consultants, Inc., has been asked to review the economic and financial condition of four Rouge River communities: Inkster, Dearborn, Dearborn Heights, and Redford Township. All four communities are embarking on large-scale investments to reduce discharge from combined sewer overflows (CSOs). The goal of this paper is to compare the economic and fiscal condition of the communities with the projected costs of the CSO investments.

We begin with a summary of the most recent measures of economic and financial health of the four communities and compare these measures to averages for Wayne County and the entire state. Next, we present an estimate of the annual costs for Phases I and II of the CSO projects and analyze the financial burden on the communities of these ongoing costs.

The last section of this paper discusses our adaptation of a methodology outlined by the U.S. Environmental Protection Agency (EPA). In a recent report, the EPA provided a guideline for state and local governments to measure the financial capability of each community to fund required CSO investments.<sup>1</sup> Looking at measures such as unemployment and debt burden, the EPA created a systematic measure of whether the project costs present a “high,” “medium,” or “low” financial burden in each community.

The projected costs to reduce discharge from CSOs will be a significant financial burden for each of the communities. Capital costs of between \$250 million and \$320 million will be needed for the second phase of the project (this is in addition to the \$69 million that has already been expended). The City of Dearborn alone will need to spend \$200 million in initial capital costs. Moreover, once the infrastructure is in place, each of the communities will have to dedicate resources for operations and maintenance, ranging from \$750,000 per year in Inkster to \$1.0 million per year in Dearborn and Dearborn Heights.

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<sup>1</sup>Environmental Protection Agency. *Combined Sewer Overflows; Guidance for Financial Capability Assessment and Schedule Development*. March 1997.

In three of the communities—Dearborn, Dearborn Heights, and Redford Township—the current economies are strong, in both absolute terms and relative to the surrounding county and state. Inkster, in contrast, is an economy characterized by high unemployment and low average income.

Using a range of required capital costs for Phase II and applying the EPA suggested guidelines, total wastewater treatment and CSO costs as a percent of household income rank in the “mid-range” financial impact for Dearborn, Redford Township, and Dearborn Heights and either “high” or “mid-range” for Inkster, depending on the project size.

## **ECONOMIC COMPARISON**

Located in Wayne County, the four communities range in population from 85,800 in Dearborn to 29,100 in Inkster (1995 data). The total population of the four communities is 224,500, or 10.9% of Wayne County residents.

Table 1 displays five measures of the strength of the underlying economy for the three cities and one township. The first measure of economic health is median household income. Median household income (in 1996 dollars) equaled \$31,420 in Inkster, only 81.0% of the state average. In contrast, Dearborn, Dearborn Heights, and Redford Township had median income above the county and state averages, ranging from 12% to 20% above the state average. The picture is the same when comparing income per person. Per-capita income ranged from \$13,371 in Inkster to \$21,013 in Dearborn. All but Inkster had per capita income above the county and state averages.

The third row of Table 1 compares the unemployment rate in the four communities. In 1996 the 6.1% unemployment rate in Inkster was significantly above the state and county averages. The other three communities—Dearborn, Dearborn Heights, and Redford Township—had an unemployment rate of approximately half the rate for the entire state.

A fourth measure of economic health in Table 1 shows the percentage of low-income K-12 students eligible for the federal free-lunch program. In general, families eligible for this federal program earn less than 185% of the poverty level of income. Using the latest available data, 58.2% of K-12 students in Inkster qualify for the federal free-lunch program, compared to 35.9% in Dearborn, 26.0% in Dearborn Heights, and 24.0% in Redford Township. In Wayne County, 41.4% of K-12 students qualified for the program, while only 29.9% qualified in the entire state.

Finally, the last row in Table 1 shows population changes during the first half of the 1990s. All four communities lost population from 1990 to 1995, ranging from a 5.1% drop in Dearborn Heights to a 3.6% decline in Inkster. Continuing the movement of population to the western part of the state, Wayne County's population declined by 2.7% during this period, while the population of the entire state rose 3.2%.

In summary, recent measures of economic health for the four communities show three of the areas—Dearborn, Dearborn Heights, and Redford Township—doing very well, both in absolute terms and relative to the county and state. In contrast, Inkster has an underlying economy with high unemployment, low income, and greater poverty than the surrounding county and state.

## **RELATIVE TAX BURDEN**

Table 2 compares the property tax burden in the four communities. Property taxes are the largest funding source for all local governments in Michigan. For example, in 1996 property taxes accounted for approximately 50% of total general fund revenues in Inkster, Dearborn Heights, and Redford Township, and over 60% of available revenues in Dearborn.

Last year, all four communities had an overall millage rate in excess of the statewide average. Inkster's 58.31 mills was the highest rate of the four communities, nearly 50% above the state average.

Table 2 also shows the millage rate currently levied by the city (or township). Each local government in Michigan has a millage limitation set by law or charter. Mills may only be levied outside this cap with a vote of the electorate. Table 2 compares the operating mills actually levied by each local government with the maximum and calculates the revenue that would be generated from the additional mills. Three of the communities, Inkster, Dearborn Heights, and Redford Township are levying the maximum number of mills allowed by law or charter without a vote of the electorate.

As a source of local government revenue, property taxes will be limited in the future due to the passage of Proposal A. Passed in 1993, this constitutional amendment limited the growth of property values subject to taxation to 5% or the rate of inflation, whichever is less, until the property is transferred. The effect of this component of Proposal A can be seen in Table 2. From 1989 to 1994, the annualized growth in property values in the four communities averaged 5.7%. Since Proposal A, the average increase has slowed to 2.1%, less than half the prior rate. Inflation-adjusted property taxes actually declined in three of the four communities during the past two years. In future years, infrastructure projects based on property tax revenues will be constrained by slower growth in property values.

## **CURRENT DEBT BURDENS**

Table 3 summarizes the current debt burden of the local communities. The table measures direct debt of the government, including general obligation and revenue debt. It does not include the indirect debt of overlapping jurisdictions, such as schools, counties, or community colleges.

Reflecting a strong underlying economy, Dearborn, Dearborn Heights, and Redford Township have a high bond rating of "A" from at least one of the major rating agencies. Inkster, however, is rated "BAA1" by Moody's, barely above investment grade.

On both a per-capita basis and as a percentage of current property values, the outstanding debt of Inkster exceeds the burden in the other three communities. The \$20.1 million in outstanding long-term debt in Inkster represents \$691 per person and 4.5% of property values. This compares to approximately \$550 per person in the other three communities and 1% of property values.

## **GOVERNMENT BUDGET OVERVIEW**

Table 4 presents a snapshot of the general fund budget of the four local governments. All four ended the last fiscal year with a budget surplus ranging from \$90,722 in Dearborn Heights to \$873,631 in Inkster. General fund revenues were between \$400 and \$450 per person in Inkster, Dearborn Heights, and Redford Township. Dearborn's municipal budget was the exception. At \$77.7 million, general fund revenues in Dearborn represented \$904 per person, over twice the average for the other three communities.

## **COMBINED SEWER OVERFLOW REQUIREMENTS**

Using CSO cost estimates supplied by the communities and outside consultants, Table 5a and 5b segregate the costs into Phase I, which in most cases has already been completed, and Phase II which has been required but not yet implemented. Table 5a incorporates estimates of the Phase II construction costs of a small basin design. Table 5b uses estimates of the costs of a large basin design.

In Phase II of the CSO project, Inkster will be required to invest between \$40 and \$70 million in one-time capital costs and approximately \$750,000 per year in operations and maintenance. To bond for the initial capital costs (over 20 years) will require an estimated \$3.4 to \$6.1 million in annual debt service. Adding the yearly operations and maintenance requirement to debt service leads to a total annual cost of \$4.2 to \$6.5 million during the next 20 years. To put this number in perspective, the annual cost of \$4.2 million for the small basin design represents \$378 per year for every household in Inkster. To finance the annual cost entirely through the property tax would require an additional 19.1 mills.

Tables 5a and 5b present the same analysis for the other three communities. While not as severe of a financial burden as in Inkster, each of the three communities would have to increase significantly their existing sewer/water rates or the general property tax rate to fund the expected costs of Phase II. Annual Phase II CSO costs represent \$505 per household, or 5.3 mills, in Dearborn; \$257 to \$325 per household in Redford Township; and \$178 to \$274 per household in Dearborn Heights.

## **EPA FINANCIAL CAPABILITY ASSESSMENT**

In April of this year, the EPA released guidelines for determining the financial capability of local governments to undertake required CSO expenditures. Incorporating a wide range of variables, the

goal of the report was to create a framework for assigning a label of “weak,” “median,” or “strong” to each local government. A government with a “weak” rating is unlikely in the near future to be in a position to afford additional CSO costs. We used this recommended guideline to establish a rating for the four Rouge River communities.

The first EPA test measures the burden of CSO costs and existing sewer costs on residential households. The Residential Burden Indicator is presented in Tables 6a and 6b. As in Tables 5a and 5b, the difference is the extent of the basin design. The first row of Table 6a lists each community’s current and projected annual CSO costs. Ranging from \$5.7 million per year in Inkster to \$6.4 million in Redford Township, these annual costs include debt service for capital investments and ongoing maintenance and operations. Using current billing data, we then calculated the residential share of the annual cost. To fully conform to the EPA guidelines, we added to the CSO costs for each community the current costs of wastewater treatment for residential users. This total cost is then scaled as a percent of medium household income and compared to the EPA thresholds. The three communities score in the “mid-range” of the EPA guideline; the total wastewater and CSO costs represent between 1% and 2% of average household income. Dearborn was not included in Table 6a because they do not have the option of a small basin design.

Table 6b presents the same format but using the large basin design requirements. Under these construction estimates, three communities, Dearborn, Dearborn Heights, and Redford Township score in the “mid-range” of financial hardship, while Inkster’s financial burden is “high”.

Table 7 shows the relative economic performance of the communities. The Economic Conditions Indicator ranges from 1 (weak) to 3 (strong). Averaging the score of six basic measures of economic health (bond rating, outstanding debt, unemployment rate, median household income, property taxes, and property tax delinquency rate), we calculated an overall economic conditions rating. Three of the four communities earn a strong rating, while Inkster, with high debt and high unemployment, scored 1.8, between a median and weak rating.

**Table 1**  
**Economic Comparisons**

	Inkster	Dearborn	Dearborn Heights	Redford Township	Wayne County	State of Michigan
Median income (a) % of state average	\$31,420 81.2%	\$43,529 112.5%	\$45,851 118.5%	\$46,339 119.8%	\$34,910	\$38,680
Per capita income (a) % of state average	\$13,371 75.8%	\$21,013 119.1%	\$20,566 116.5%	\$18,766 106.3%	\$16,230	\$17,649
Unemployment rate (b)	6.1%	2.6%	2.5%	2.3%	5.5%	4.9%
% low-income K-12 students (c)	58.2%	35.9%	26.0%	24.0%	41.1%	29.9%
Population change, 1990-1995 (d)	-3.6%	-4.9%	-5.1%	-4.6%	-2.7%	3.2%

(a) 1996 median household and per capita income was computed by inflating 1990 Bureau of Census and SEMCOG data t using the Detroit Area and U.S. CPI

(b) 1996 annual average provided by the MESA (formerly the MESG).

(c) FY 1995-96 data provided by the Michigan Department of Education.

(d) Calculations by PSC based on data from the Michigan Information Center.

Source: Various government agencies

**Table 2**  
**Relative Property Tax Burden, 1996**

	Inkster	Dearborn	Dearborn Heights	Redford Township	Wayne County(a)	State of Michigan
Overall millage rate	58.31	49.78	39.64	41.77	48.81	38.88
Homestead mills	49.88	41.84	35.82	35.79	39.22	31.00
Non-homestead mills	67.88	53.67	52.22	53.76	59.90	48.75
City (township) millage rate	26.65	15.11	15.67	14.84	NA	NA
Mills subject to non-voted limit	19.52	13.72	7.02	5.00	NA	NA
Non-voted millage limitation	19.52	13.82	7.02	5.00	NA	NA
Excess revenue capacity	\$0	\$378,110	\$0	\$0	NA	NA
Growth in property values (annual rate)						
Nominal Growth:						
1989-1994	3.4%	8.6%	6.1%	4.6%	5.6%	6.4%
1994-1996	1.7%	1.0%	2.4%	3.4%	3.3%	4.6%
Real Growth:						
1989-1994	0.0%	5.1%	2.6%	1.2%	2.2%	2.9%
1994-1996	-1.0%	-1.7%	-0.3%	0.6%	0.5%	1.8%

(a) 1995

NA = not applicable

Source: Calculations by PSC based on data from the Michigan Department of Treasury.

**Table 3  
Current Debt Burdens**

	Inkster	Dearborn	Dearborn Heights	Redford Township	Wayne County	State of Michigan
Existing debt outstanding (a)	\$20,092,832	\$47,598,000	\$36,023,677	\$26,929,602	\$959,600,000	\$3.05 bill.
Debt per capita	\$691	\$558	\$624	520	\$466	.331
Debt as a % of property value	4.52	0.70	1.77	.44	1.66	NA
Bond rating	"BAA1"	"A"	"A"	"A"	"BBB+"	"AA"

(a) includes general obligation and revenue debt of the local government.  
Does not include overlapping debt of non-city taxing jurisdictions

NA = not applicable

Source: Comprehensive Annual Financial Reports of the local governments, FY1996

**Table 4  
Budget Overview, FY 1996**

	Inkster	Dearborn	Dearborn Heights	Redford Township	Wayne County	State of Michigan
General fund revenue per capita	\$424	\$904	\$458	\$408	\$170(a)	\$884
General fund expenditures per capita	\$394	\$817	\$456	\$391	\$166(a)	\$878
Operating (deficit)/surplus	\$873,631	\$411,803	\$90,722	\$643,497	\$8,646,082	\$91,300,000
Operating (deficit)/surplus as a % of revenues	7.1%	0.5%	0.3%	3.0%	2.5%	1.1%

(a) The General Fund budget in Wayne County represents only one-third of total governmental spending

Source: Comprehensive Annual Financial Reports of the local governments

**Table 5a**  
**Combined Sewer Overflow Requirements**  
**Small Basin Design**

	Inkster	Dearborn	Dearborn Heights	Redford Township
Project costs - Phase I (local share)	\$14,000,000	NA	\$15,800,000	\$10,000,000
Annual OM&R costs	\$390,000	NA	\$390,000	\$390,000
Project costs - projected, Phase II (a)	\$40,000,000	NA	\$37,000,000	\$52,000,000
Annual OM&R Costs (a)	\$750,000	NA	\$1,000,000	\$800,000
<b>Phase II Financing Burden</b>				
Aggregate debt service requirement (b)	\$68,776,800	NA	\$63,619,200	\$89,409,600
Annual debt service	\$3,438,840	NA	\$3,180,960	\$4,470,480
Annual financing burden per household (c)	\$378	NA	\$178	\$257
Required millage rate (c)	19.1	NA	4.1	5.6

(a) Estimates for Inkster, Dearborn Heights, and Redford Township provided by Wade-Trim (Taylor, MI)

(b) Assumes 20-year maximum maturity at 6.0% interest rate

(c) Includes Phase II annual debt service and OM&R costs

Source: Calculations by PSC based on data from the local governments and Wade-Trim

**Table 5b  
Combined Sewer Overflow Requirements  
Large Basin Design**

	Inkster	Dearborn	Dearborn Heights	Redford Township
Project costs - Phase I (local share)	\$14,000,000	\$29,300,000	\$15,800,000	\$10,000,000
Annual OM&R costs	\$390,000	\$700,000	\$390,000	\$390,000
Project costs - projected, Phase II (a)	\$70,900,000	\$200,000,000	\$63,100,000	\$67,400,000
Annual OM&R Costs (a)	\$750,000	\$1,000,000	\$1,000,000	\$800,000
<b>Phase II Financing Burden</b>				
Aggregate debt service requirement (b)	\$121,908,000	\$343,886,000	\$108,496,800	\$115,888,800
Annual debt service	\$6,095,400	\$17,194,000	\$5,424,840	\$5,794,440
Annual financing burden per household (c)	\$610	\$505	\$274	\$325
Required millage rate (c)	30.8	5.3	6.3	7.1

(a) Estimates for Inkster, Dearborn Heights, and Redford Township provided by Wade-Trim (Taylor, MI)

(b) Assumes 20-year maximum maturity at 6.0% interest rate

(c) Includes Phase II annual debt service and OM&R costs

Source: Calculations by PSC based on data from the local governments and Wade-Trim

**Table 6a**  
**EPA Financial Capability Assessment:**  
**Residential Burden Indicator**  
**Small Basin Design**

	Inkster	Dearborn	Dearborn Heights	Redford Township
Annual CSO costs (current and projected)(a)	\$5,724,240	NA	\$5,879,600	\$6,455,720
Annual current sewer costs(b)	\$2,071,696	NA	\$10,708,480	\$5,369,000
Residential share	\$6,236,749	NA	\$13,054,819	\$10,878,742
CSO and sewer costs per household	\$556	NA	\$556	\$536
As a % of average income	1.77	NA	1.21	1.16
<b>EPA FINANCIAL IMPACT*</b>	<b>Mid-Range</b>	<b>NA</b>	<b>Mid-Range</b>	<b>Mid-Range</b>

(a) Assumes approximately \$2.0 million to \$2.5 million of Phase I project costs were financed through the State SRF at 2.5% and the remaining debt financed at 6.0%

(b) For Dearborn Heights, assumes additional debt service on \$33 million at 2.5% for Downriver sewers and \$11.5 million at 6.0% for RedRun Basin, Doxtator Sewer, and Lift Station 1A

\* the EPA cut-off is 0% to 1% Low, 1% to 2% Mid-Range, and 2% and up High

na = not applicable

Source: PSC estimates

**Table 6b**  
**EPA Financial Capability Assessment:**  
**Residential Burden Indicator**  
**Large Basin Design**

	Inkster	Dearborn	Dearborn Heights	Redford Township
Annual CSO costs (current and projected)(a)	\$8,380,800	\$20,757,120	\$8,123,480	\$7,779,680
Annual current sewer costs(b)	\$2,071,696	\$19,711,191	\$10,708,480	\$5,369,000
Residential share	\$8,361,997	\$22,807,571	\$14,820,752	\$12,096,786
CSO and sewer costs per household	\$746	\$632	\$631	\$596
As a % of average income	2.37	1.45	1.38	1.28

**EPA FINANCIAL IMPACT\***

	High	Mid-Range	Mid-Range	Mid-Range
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(a) Assumes approximately \$2.0 million to \$2.5 million of Phase I project costs were financed through the State SRF at 2.5% and the remaining debt financed at 6.0%

(b) For Dearborn Heights, assumes additional debt service on \$33 million at 2.5% for Downriver sewers and \$11.5 million at 6.0% for RedRun Basin, Doxtator Sewer, and Lift Station 1A

\* the EPA cut-off is 0% to 1% Low, 1% to 2% Mid-Range, and 2% and up High

Source: PSC estimates

**Table 7**  
**EPA Financial Capability Assessment:**  
**Economic Conditions Indicator**

	<b>Inkster</b>	<b>Dearborn</b>	<b>Dearborn Heights</b>	<b>Redford Township</b>
Bond rating	Baa1	A	A	A
EPA rating	Median	Strong	Strong	Strong
Outstanding debt as a % of property values	7.7	0.69	1.57	1.44
EPA rating	Weak	Strong	Strong	Strong
Unemployment rate	6.1	2.6	2.5	2.3
EPA rating	Median	Strong	Strong	Strong
Median household income	\$31,420	\$43,529	\$45,851	\$46,339
EPA rating	Median	Median	Median	Median
Property tax revenues as a % of values	1.3	0.7	0.8	0.7
EPA rating	Strong	Strong	Strong	Strong
Property tax collection delinquency rate	11.1	1.7	0.5	4.7
EPA rating	Weak	Strong	Strong	Median
<b>EPA FINANCIAL CAPABILITY RATING</b> <b>(Weak=1, Median=2, Strong=3)</b>	<b>Median</b> <b>(1.8)</b>	<b>Strong</b> <b>(2.8)</b>	<b>Strong</b> <b>(2.8)</b>	<b>Strong</b> <b>(2.7)</b>

Source: PSC estimates