

Section 5

FISCAL IMPACTS ANALYSIS

5.1 Overview

When conducting an analysis of the economic values of specific kinds of industrial activity in a region or a state, it is instructive to look at the impacts of industrial change and growth on the flow of revenues into local governments and state governments. State and local governments are an intrinsic component of a regional or state economy, and we can measure the economic outcomes to local and state government operations using fiscal impact modeling.

Overall, these models are designed to use the findings of an input-output assessment to translate the job and income growth into household impacts, and then analyze those changes within the context of local government operations and state government receipts. Thus, for purposes of this Study, the jobs and income findings of the economic impacts analysis for recyclable materials processing, end-use, and remanufacturing, as well as equipment manufacturing were used to estimate the projected fiscal outcomes for these specific recycling activities.

5.2 Methodology

Fiscal impacts are estimated for Iowa's urban counties (its 20 metropolitan counties) and its rural counties (its 79 non-metropolitan counties)¹. In this analysis, the processor and the end-use jobs were apportioned by the statewide distribution of manufacturing jobs in Iowa. The equipment manufacturers were compiled without differentiating among urban and rural counties; only state totals are reported.

¹ Metropolitan counties consist of counties with a core central city of 50,000 or more and all counties with which they have a strong flow of incommuters. In 1990, Iowa had eight primary metropolitan counties with one of the areas consisting of three counties for a total of ten Metropolitan Statistical Area counties. In 2000, the state added a metropolitan county and nine other counties were determined to be otherwise linked to Iowa's metropolitan areas for a total of 20 urban (or metropolitan statistical area) counties.

The findings first isolate all local government own-source revenues – taxes, charges, and fees that are generated from their local population², by source of that revenue, and local government direct expenditures by major function. Local schools, municipalities, and county governments account for the vast majority of local government receipts and spending. Comparatively minor amounts of revenues and spending are attributable to townships and special districts.

All households demand a mix of public services that can be estimated. To fund these service demands, we isolated an expected flow of revenues based on expected income and households. When economies grow, their local government revenues typically grow along with service demands. Larger, more urban economies have generally higher incomes and require a more extended set of public services.

In this analysis for the local and state government activities, we only estimated their own-source revenues. Governments receive revenues from other governments. The federal government underwrites a large amount of state government activity, and state government contributes strongly towards the funding of local government activities, most notably for local schools and for highways. The sum of government own-source receipts plus all net transfers in from other governments equals their general revenues. In previous studies, using a different modeling system, we simulated inter-governmental transfers. In this analysis, however, we do not account for transfers and just measure own-source revenue generation. Increasingly, local government officials are much more interested in the relationship between economic activity and own-source receipts, recognizing that local and state governments must annually balance their budgets, spending must equal receipts. The use of own-source revenues impact summaries allows for a preliminary benchmark for gauging the marginal change in local or state government resources attributable to measured economic change.

The accompanying tables simply present the local own-source revenues and direct spending estimates for the local governments and for the state as a whole for the categories for which economic values were calculated: recycling processors, end-users, remanufacturing and reuse businesses, the export value of collection activity, and equipment manufacturers. There is no reconciliation of revenues and expenditures in this assessment or tracking of inter-governmental revenue flows. The tables below present the government finance values that would be expected given the jobs and the incomes that are supported in the recycling economy that we measured.

² In the 2001 study, the Iowa Economic and Fiscal Impact model was used to estimate government receipts and costs. That model was built using benchmark fiscal 1997 government finances data and results were driven by expectations of local population growth stimulated by employment changes. It would be inappropriate to apply it to this exercise. A different model was constructed for this project using current government finance data. This model has been built to align with economic impact summaries in Iowa, and it is driven by estimates of income growth in Iowa or its sub-regions. The model produces estimates of own-source revenues and of all direct spending for state and local governments in Iowa (albeit, only own-source receipts are reported in this study). This newer model does not track intergovernmental revenue flows; hence, the results of this fiscal analysis are not easily compared to the previous study. A summary of own-source tax revenues comparing the two periods is presented in a following section so that readers can translate economic impact-related information and changes into fiscal impact outcomes over the two study time periods.

5.3 Fiscal Impacts of Recyclable Materials Processing

The data that were compiled in the economic impacts analysis were used to estimate local and state government fiscal outcomes that are generated by recyclable materials processing in the state. This estimate refers to all of the original processing sectors assessed in this study – paper, plastics, glass, metals, and wood, along with organic wastes, C&D debris, used tires, and electronics. These findings are depicted below in Table 5-1.

Table 5-1
Estimated Fiscal Impacts Associated with Recyclable Materials Processing In Iowa
(2007 Study)^{1,2}

General Revenue from Own Sources	Local Government			State Government		
	Urban	Rural	Total	Urban	Rural	Total
Taxes	1,681,224	1,905,770	3,586,994	2,445,000	2,771,556	5,216,556
Property ³	1,404,027	1,591,550	2,995,577	-	-	-
Sales and gross receipts	224,403	254,375	478,778	1,117,116	1,266,319	2,383,435
Individual income	24,996	28,335	53,331	958,381	1,086,383	2,044,763
Corporate income	-	-	-	79,281	89,870	169,151
Motor vehicle license	6,769	7,673	14,442	162,574	184,288	346,862
Other taxes	21,029	23,838	44,867	127,648	144,697	272,344
Current charges	890,143	1,009,031	1,899,174	795,882	902,181	1,698,063
Miscellaneous	223,380	253,214	476,594	359,648	407,683	767,330
Total General Revenue from Own Sources (\$)	2,794,747	3,168,016	5,962,762	3,600,530	4,081,420	7,681,950

¹ Data is in 2005 dollars.

² Totals may not sum due to rounding.

³ The fiscal impacts of Iowa's recycling property tax exemption are estimated to be minimal and thus, were not accounted for in this analysis.

Own-source receipts to all local governments in urban/metropolitan counties (i.e., metropolitan statistical area) that are attributable to the economic activity of processing commodities for recycling in Iowa are estimated to generate \$2.8 million, \$1.4 million of which would be in property taxes. Rural area local government own-source revenue receipts amount to \$3.2 million, \$1.6 million of which are property taxes. Total estimated own-source revenues supported by the commodity processing firms and their total employment in Iowa would be \$5.96 million. In all, recyclable materials processing supports \$7.7 million in state own-source revenues, \$5.2 million of which are from taxes.

5.4 Fiscal Impacts of End-Use Manufacturing

From the economic impacts analysis, we projected that all estimated end-use manufacturing in Iowa sustained 25,709 jobs and generated nearly \$1.15 billion in labor income. Those jobs and incomes can be used to estimate the local and state government fiscal impacts, as depicted below in Table 5-2.

As the employment and the income numbers are large, the amounts of local and state receipts are also large. The local governments in urban counties would yield \$37.7 million in own-source revenues, of which \$18.9 million would be property taxes. The rural counties would generate nearly \$42.7 million in own-source revenues, \$21.5 million of which would be property taxes. Combined, end-use manufacturing employment in Iowa is expected to sustain \$80.5 million in local government own-source revenues, of which \$40.4 million are property taxes. State receipts are substantial, too. Iowa's own-source revenues driven by end-use economic impact incomes would be \$103.7 million, \$70.4 million of which would be taxes.

Table 5-2
Estimated Fiscal Impacts Associated with End-Use Manufacturing In Iowa
(2007 Study)^{1,2}

General Revenue from Own Sources	Local Government			State Government		
	Urban	Rural	Total	Urban	Rural	Total
Taxes	22,684,527	25,714,293	48,398,819	32,990,046	37,396,227	70,386,273
Property ³	18,944,341	21,474,564	40,418,905	-	-	-
Sales and gross receipts	3,027,839	3,432,240	6,460,080	15,073,092	17,086,268	32,159,361
Individual income	337,271	382,317	719,587	12,931,297	14,658,413	27,589,711
Corporate income	-	-	-	1,069,730	1,212,604	2,282,334
Motor vehicle license	91,335	103,534	194,869	2,193,592	2,486,571	4,680,163
Other taxes	283,741	321,637	605,378	1,722,334	1,952,370	3,674,704
Current charges	12,010,574	13,614,717	25,625,292	10,738,726	12,173,000	22,911,726
Miscellaneous	3,014,031	3,416,588	6,430,619	4,852,678	5,500,806	10,353,484
Total General Revenue from Own Sources (\$)	37,709,132	42,745,598	80,454,730	48,581,450	55,070,033	103,651,483

¹ Data is in 2005 dollars.

² Totals may not sum due to rounding.

³ The fiscal impacts of Iowa's recycling property tax exemption were minimal and thus, were not accounted for in this analysis.

5.5 Fiscal Impacts of Remanufacturing and Reuse Industries

Wood product reuse, computer and peripheral repair and reuse, used motor vehicle parts, used retail goods, and tire retreading in Iowa supported 4,363 jobs and nearly \$115 million in labor incomes. Those economic levels resulted in the expected government receipts displayed below in Table 5-3.

For urban areas, these Iowa establishments supported \$3.8 million in local government own-sources of revenues, of which \$1.9 million were property taxes. For the rural areas, \$4.3 million in receipts were raised, of which \$2.1 million were property taxes. State own-source receipts were \$10.4 million, of which \$7.0 million were taxes.

Table 5-3
Estimated Fiscal Impacts Associated with Remanufacturing and Reuse Industries In Iowa (2007 Study)^{1,2}

General Revenue from Own Sources	Local Government			State Government		
	Urban	Rural	Total	Urban	Rural	Total
Taxes	2,265,533	2,568,120	4,833,653	3,294,759	3,734,810	7,029,569
Property ³	1,891,996	2,144,693	4,036,689	-	-	-
Sales and gross receipts	302,394	342,782	645,177	1,505,369	1,706,428	3,211,797
Individual income	33,684	38,182	71,866	1,291,466	1,463,955	2,755,420
Corporate income	-	-	-	106,835	121,104	227,940
Motor vehicle license	9,122	10,340	19,462	219,077	248,337	467,414
Other taxes	28,338	32,122	60,460	172,012	194,986	366,997
Current charges	1,199,512	1,359,720	2,559,231	1,072,491	1,215,733	2,288,224
Miscellaneous	301,015	341,219	642,234	484,643	549,373	1,034,016
Total General Revenue from Own Sources (\$)	3,766,060	4,269,059	8,035,119	4,851,893	5,499,916	10,351,809

¹ Data is in 2005 dollars.

² Totals may not sum due to rounding.

³ The fiscal impacts of Iowa's recycling property tax exemption were minimal and thus, were not accounted for in this analysis.

5.6 Fiscal Impacts of Recycling Equipment Manufacturing

In the equipment manufacturer economic impact section, we identified a total of 994 jobs and \$42.2 million in labor incomes that are attributable to Iowa firms that manufacture equipment for the recycling industry. Because the number of these firms

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is relatively small and localized, we are only reporting the local and state government total amounts in Table 5-4 without an urban and rural breakdown.

We estimate approximately \$2.95 million in local government own-source receipts, \$1.5 million of which would come from property taxes. State own-sources would be \$3.8 million, \$2.6 million of which would be in the form of total taxes.

Table 5-4
Estimated Fiscal Impacts Associated with Recycling Equipment Manufacturing In Iowa
(2007 Study)^{1,2}

General Revenue from Own Sources	Local Government	State Government
Taxes	1,776,312	2,583,285
Property ³	1,483,436	-
Sales and gross receipts	237,095	1,180,298
Individual income	26,410	1,012,585
Corporate income	-	83,765
Motor vehicle license	7,152	171,769
Other taxes	22,218	134,867
Current charges	940,488	840,896
Miscellaneous	236,014	379,989
Total General Revenue from Own Sources	\$2,952,813	\$3,804,170

¹ Data is in 2005 dollars.

² Totals may not sum due to rounding.

³ The fiscal impacts of Iowa's recycling property tax exemption were minimal and thus, were not accounted for in this analysis.

5.7 Fiscal Impacts of Collection Export Sales Activity

In this Study, we have estimated that export sales by Iowa collectors constitutes an economic impact in that those sales are going to a final demand external to the state economy and are therefore resulting in an in-flow of funds into Iowa.

Table 5-5 shows that this activity would support \$277,992 in local government own-source receipts, of which \$139,658 would be property taxes. State receipts would be \$358,143, and \$243,203 would be from taxes. The fiscal impacts from this activity were not included in previous studies.

Table 5-5
Estimated Fiscal Impacts Associated with Recycling Collection Export Sales In Iowa
(2007 Study)^{1,2}

General Revenue from Own Sources	Local Government	State Government
Taxes	167,230	243,203
Property ³	139,658	-
Sales and gross receipts	22,321	111,119
Individual income	2,486	95,330
Corporate income	-	7,886
Motor vehicle license	673	16,171
Other taxes	2,092	12,697
Current charges	88,542	79,166
Miscellaneous	22,219	35,774
Total General Revenue from Own Sources	\$277,992	\$358,143

¹ Data is in 2005 dollars.

² Totals may not sum due to rounding.

³ The fiscal impacts of Iowa's recycling property tax exemption were minimal and thus, were not accounted for in this analysis.

5.8 Summary

The comparisons of the fiscal impacts of the processing, end-use, and remanufacturing/reuse industries in Iowa, reflect the following:

- End-use fiscal impacts, measured using revenues from own-sources and property taxes, greatly exceed the fiscal impacts for all of the other recycling activities combined.
- The remanufacturing and reuse industry's fiscal impacts exceed the fiscal impacts for the processing industry.

If the fiscal benefits to state and local governments are factored into the analysis, the net benefits are substantial. Specifically, Tables 5-1 through 5-3 (processing, end-use, and remanufacturing/reuse) identify local governmental revenues resulting from Iowa's recycling industry to be \$94.5 million and state revenues to be \$121.7 million. The local benefits include \$5.96 million attributed to recyclable materials processing, \$80.5 million attributed to end-use manufacturing, and \$8.0 million attributed to remanufacturing and reuse. The statewide benefits include \$7.7 million attributed to recyclable materials processing, \$103.7 million attributed to end-use manufacturing, and \$10.4 million attributed to remanufacturing and reuse.

Most interestingly, when the results are aggregated into urban and rural sectors, the fiscal impacts to the rural sector are higher than the urban fiscal impacts in each of the three main industries – processing, end-use, and remanufacturing/reuse.

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