

City of Milwaukee: The Collection of Municipal Fees

**Prepared for the City of Milwaukee
Budget and Management Division**

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Foreword

This report is the result of collaboration between the Robert M. La Follette School of Public Affairs at the University of Wisconsin–Madison, and the Budget and Management Division of the City of Milwaukee’s Department of Administration. Our objective is to provide graduate students at La Follette the opportunity to improve their policy analysis skills while contributing to the capacity of the city government to provide public services to the residents of Milwaukee.

The La Follette School offers a two-year graduate program leading to a master’s degree in public affairs. Students study policy analysis and public management, and they can choose to pursue a concentration in a policy focus area. They spend the first year and a half of the program taking courses in which they develop the expertise needed to analyze public policies.

The authors of this report are all in their last semester of their degree program and are enrolled in Public Affairs 869 Workshop in Public Affairs. Although acquiring a set of policy analysis skills is important, there is no substitute for doing policy analysis as a means of learning policy analysis. Public Affairs 869 gives graduate students that opportunity.

This year the students in the workshop were divided into six teams, three under my supervision and three supervised by my La Follette School colleague Professor Karen Holden. The Milwaukee-related research topics were solicited from various city government departments by Eric Pearson, Budget and Policy Manager in the Division of Budget and Management. The authors of this report were assigned to work on a research project on municipal service charges for the Division of Budget and Management.

In recent years there has been a marked increase in the number of property-related user fees that were not paid in a timely fashion and hence ended up on the property tax bills of property owners. The authors of this report conducted detailed statistical analyses of the payment and non-payment of user fees and, based on their results, suggest policies to improve the user fee collection rates.

This report would not have been possible without the support and encouragement of city Budget Director Mark Nicolini and project coordinator Eric Pearson. A number of other people throughout city government contributed to the success of the report. Their names are listed in the acknowledgements section of the report.

The report also benefited greatly from the support of the staff of the La Follette School. Cindy Manthe contributed logistic support, and Karen FASTER, the La Follette Publications Director, edited the report and managed production of the final bound document.

By involving La Follette students in the tough issues confronting city government in Milwaukee, I hope they not only have learned a great deal about doing policy analysis but have also gained an appreciation of the complexities and challenges facing city governments in Wisconsin and elsewhere. I also hope that this report will contribute to decisions about improving the administration of user fees and charges in Milwaukee.

Andrew Reschovsky
May 2011
Madison, Wisconsin

Acknowledgments

We owe sincere gratitude to the many people within City of Milwaukee government who contributed to the successful completion of this report. In particular, we would like to thank Lynne Steffen, Carrie Lewis, Desirae Bellawood, Doug Forbush, Paul Klajbor, Jim Klajbor, Craig Kammholz, and David Fortney for their insight and patience, and Eric Pearson and Dennis Yaccarino for their direction and feedback.

We also extend our deepest appreciation to our colleagues and professors at the La Follette School of Public Affairs, especially Dr. Andrew Reschovsky. Professor Reschovsky provided us with valuable guidance every step of the way. Additional thanks go out to our peers for their thoughtful commentary on earlier drafts, and to Karen FASTER, Publications Director for the La Follette School, for her critical editorial support.

Executive Summary

Recent evidence suggests that an increasing share of Milwaukee's property-related municipal fees is not being paid in a timely fashion. If unpaid, certain property-related fees can be placed on property tax bills and collected as special charges on property owners' tax bills. While the majority of fees are eventually collected, any delay in municipal charge payment is costly. The city government must devote scarce resources to the process of tracking and collecting fees, undertake borrowing to cover the short-term delayed payments, and forgo interest revenue on uncollected funds. Given the challenging fiscal environment in the city, the City of Milwaukee Budget and Management Division would like to explore policies to enhance initial municipal fee collection and avoid the costs associated with placing fees on property tax bills as special charges.

In this report, we use information gathered from interviews with City of Milwaukee staff and data files from city departments to analyze fee collection over time and the factors that may affect payment. First, we examine the current collection process across city departments and fees. Second, we look at factors that may influence fee collection, including characteristics of fees, characteristics of properties, and characteristics of collection practices. Third, we use regression analysis to identify the effects of the above sets of characteristics on payment rates. Finally, we craft policy options and offer suggestions for further analysis.

This report offers several important findings regarding the municipal fee process in Milwaukee. First, Milwaukee's system for billing and collecting municipal fees is decentralized; practices and outcomes vary significantly by department and by fee. Second, nonpayment of municipal fees is associated with characteristics of fees, characteristics of properties, and characteristics of collection practices. Our analysis suggests that certain collection practices—particularly penalties for late payment—are associated with higher collection rates. Increasing payment options for consumers may also result in increased initial collection rates. We therefore propose that the City consider mailing invoices with due dates, issuing late penalties, and/or increasing payment options for all fees. Each alternative imposes administrative costs, but if the policy change reduces the number and value of special charges, the City will benefit from substantial savings that may outweigh the associated costs.

Finally, we recommend that the City undertake a more comprehensive evaluation of its fee collection system before it decides to implement any collection policy option. A comprehensive analysis would require improved data maintenance across departments to track charges from initial billing to final payment. It would also require that the City gather data on costs associated with fee collection under the current system and policy alternatives. Once the City achieves these goals, it will be able to identify the most cost-effective way to enhance municipal fee collection.

Introduction

In 2011, the City of Milwaukee, like many of America's central cities, faces a challenging fiscal environment. While the weak economy, characterized by a persistently high unemployment rate, results in increased demand for city services, the City is facing the prospect of declining revenues. The federal budget for fiscal year 2011 includes substantial reduction in federal funding of city-operated programs, and the prospects of further reduction in the fiscal year 2012 federal budget are high. Governor Scott Walker's proposed budget for the 2011-13 biennium not only calls for sharp cuts in state aid to the City, it would also limit any increase in the City's property tax levy to the tax on the increase in property values due solely to new construction. With the weak economy, this increase is likely to be less than 1 percent.

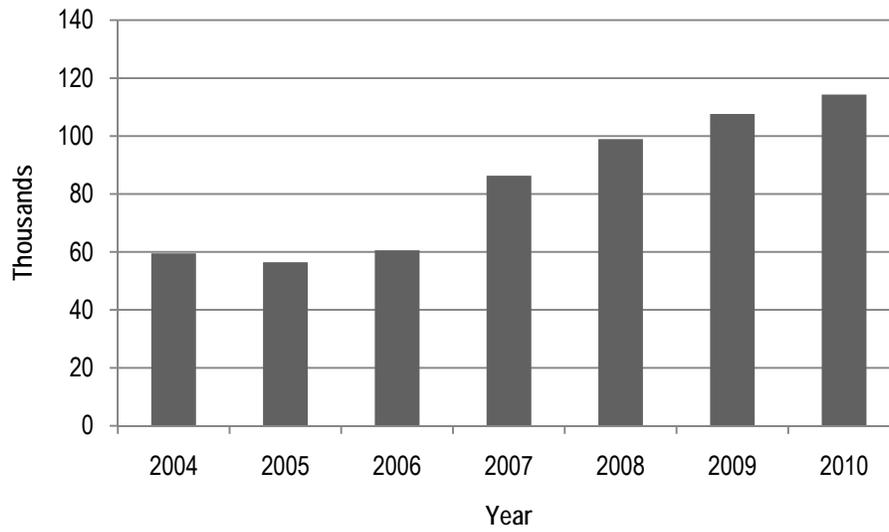
Given these revenue constraints, the City must work hard to maximize the revenue it collects from other existing revenue sources. Since around the mid 1990s, the City has turned increasingly to user fees and charges as a way of compensating for reductions in intergovernmental revenues and preventing rapid increases in the rate of property taxation. There are two major types of fees and charges. The first is fees issued to individuals or businesses in conjunction with pursuing a particular activity, such as parking a car or utilizing a recreational facility. The second is related to the ownership of real property located within the city. Although the individual type of fee is generally collected prior to the utilization of city facilities, property-related fees are usually billed to the property owner after the delivery of city services.

Recent evidence suggests that an increasing share of property-related fees is not being paid in a timely fashion. Any delay in payment is costly to the City, which must devote scarce resources to the process of collecting fees. To the extent that delinquencies are not budgeted, the City may have to undertake additional short-term borrowing. The city incurs the real costs of debt service, foregone revenue and outsourced collections, as well as costs associated with the time and resources of city staff dedicated to tracking and monitoring unpaid charges.

In most cases, the City eventually collects delinquent property-based fees and charges. Collection occurs because state statutes allow the City to add many of these fees to the property tax roll as "special charges." If a property owner neglects to pay the special charges on his or her property tax bill, the City can place a lien on the property. This process can eventually end in the City foreclosing on the property and selling it as a means of recouping unpaid charges.

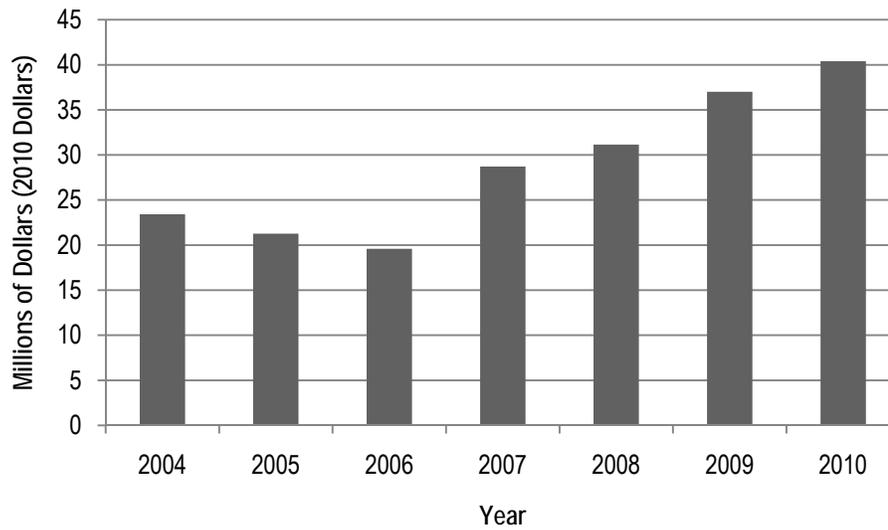
As shown in Figures 1 and 2, both the number and the value of fees that have been added to the property tax roll as special charges have grown dramatically from 2004 to 2010. There were 60,000 unpaid fees in 2004 with a total value of \$23 million were converted to special charges. By 2010, that number had grown to 115,000 with a value of \$40 million, an increase in value of 74 percent.

Figure 1. City of Milwaukee Special Charges: Number of Charges 2004-2010



Source: Calculated with data from the City of Milwaukee Assessor's Office.

Figure 2. City of Milwaukee Special Charges: Total Dollar Value 2004-2010



Source: Calculated with data from the City of Milwaukee Assessor's Office.

Of greater concern is that the proportion of property-related fees and charges that become delinquent and are added to the property tax roll has been growing in recent years, from 17.3 percent in 2007 to 20.3 percent in 2010.¹ Approximately 30 percent of properties in the City of Milwaukee incurred special charges on their 2010 tax bills, and 7 percent of properties had special charges outstanding from their 2009 tax bills.²

We have been asked by the City of Milwaukee Budget and Management Division to determine why an increasing number of property-related user fees are not being collected in a timely fashion and are ending up on the property tax roll. Our goal in this report is to understand the process and procedures being used to administer user fees and charges, and to recommend policies that would address the growing number of special charges.

¹ Calculated using data from Milwaukee Water Works and the departments of Public Works and Neighborhood Services. Note that these figures include only charges from these three departments labeled paid and assessed (placed on tax roll). The data exclude charges with a status of bankrupt, foreclosed, and cancelled/closed. See Appendix A for more information on our dataset.

² Calculated using data from the City of Milwaukee Treasurer's Office merged with data from the City's Master Property Record (MPROP) database.

Statement of Problem

Nonpayment of property-related municipal fees has been an increasing problem for Milwaukee. We estimate that about \$70 million of all municipal fees that went onto property tax bills as special charges between 2007 and 2010 are still outstanding—a figure that represents 4.7 percent of the City’s budget for 2011.³

The majority of special charges are collected within three years – in fact, only 0.02 percent of special charges assessed in 2007 remain unpaid in 2011.⁴ However, delayed collection of fees imposes costs on the City in terms of lost interest revenue, debt, and administrative expenditures. The City of Milwaukee forgoes an estimated \$10,000 in annual interest revenue on uncollected municipal fees.⁵ Moreover, to balance the budget the Treasurer borrows between \$30 million and \$45 million each year to cover unpaid special charges. Finally, the City faces administrative costs associated with pursuing collection of special charges, and as the charges become more delinquent, the costs of collection increase.

One of the reasons that so many user fees remain unpaid and end up on the property rolls is that some fee-issuing city departments appear to have little incentive to ensure fees are collected. For departments such as Neighborhood Services and Public Works, which receive funding primarily through appropriations, the City pays for services provided even if property owners initially do not. Additionally, anecdotal evidence suggests that the costs of efforts to aggressively collect fees have exceeded the benefits in the past. For example, one Neighborhood Services employee reported that the department once sent multiple invoices for some fees but stopped after failing to observe a noticeable effect on collection rates.

The City of Milwaukee Management and Budget Division would like to explore policies to enhance initial municipal fee collection and avoid the costs associated with placing fees on property tax bills as special charges. This report analyzes fee collection over time and the factors that may affect payment to help the City identify cost-effective ways to maximize collection.

³ Calculated using data from the City of Milwaukee’s Treasurer’s Office and the Department of Administration’s *2011 Plan and Budget Summary* (see City of Milwaukee Department of Administration, 2010).

⁴ Calculated using data from the City of Milwaukee’s Treasurer’s Office.

⁵ Calculated using the nationwide money market average interest rate of 0.22 percent for an average of six months on the 21 percent of municipal fees that do not have late penalties.

Project Goals and Methodology

To help Milwaukee understand the factors affecting fee collection rates and evaluate the current collection system, we examine the municipal fee collection process in detail. In our analysis we make three sets of comparisons. We compare the different types of municipal fees' characteristics. We contrast characteristics of properties that receive special charges with those that do not. We also compare characteristics of the different collection practices. We identify key variables that influence collection rates and make recommendations to improve the municipal fee collection process in Milwaukee.

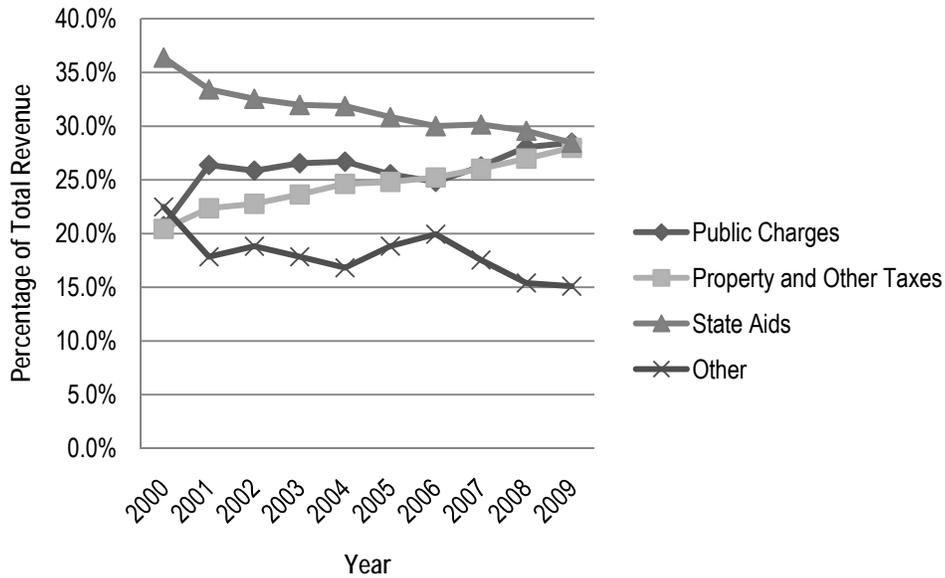
We use a variety of data sources. We rely on in-person and telephone interviews with City of Milwaukee staff, annual and longitudinal records of the Treasurer and Assessor, and accounts receivable files from city departments. Because the vast majority of special charges—more than 99 percent—originate in Milwaukee Water Works and the departments of Neighborhood Services and Public Works, we focus our analysis on fees originating in these three departments. By linking department data with individual tax key information from Milwaukee's Master Property Record, we created a dataset with hundreds of thousands of individual fees issued from 2007 to 2010 with the charge code, fee amount, and the fee status (paid or assessed onto the property tax bill), as well as characteristics of properties that incurred the fees. Specifically, these were the assessment class, median property value, owner occupancy status, and aldermanic district. Our dataset allowed us to look at fee issuance and collection across charges and departments as well as descriptive characteristics of properties with special charges. See Appendix A for more information on our data collection and limitations.

Our report proceeds as follows. First, we examine the number and value of municipal fees and special charges in Milwaukee, the current collection process, and departmental use of invoices, late fees, and payment options. Second, we look at factors that may influence fee collection, including characteristics of fees, characteristics of properties, and collection practices. Third, we use regression analysis to identify the effects of the above sets of characteristics on payment rates. Finally, we craft policy options and offer suggestions to further analyze the collection system and improve initial collection of municipal fees.

Municipal Fees and Special Charges in Milwaukee

Milwaukee has increased its reliance on municipal fees over the past decade. From 2000 to 2009, municipal fees—referred to in Wisconsin Department of Revenue data as “public charges”—went from 20.7 to 28.5 percent of total city revenue, an increase in share of nearly 40 percent. Figure 3 illustrates the share of each of the City’s major revenue sources for years 2000 through 2009. See Appendix B for information on Milwaukee’s revenue sources.

Figure 3. Percentage of Total Revenues by Source: City of Milwaukee 2000-2009



Source: Calculated using data from the Wisconsin Department of Revenue.

When certain property-related public charges go unpaid, they are placed on property tax bills as special charges. We use the term “municipal fees” to refer to property-related fees that are authorized to be placed on property tax bills as special charges before the fees actually become special charges. We use the term “special charges” to refer to municipal fees that have been placed on property tax bills due to nonpayment. State statutes give municipalities the legal authority to place fees on a property tax bill as special charges and establish a lien against the property (*Wis. Stat.* §66.0627 [2010]). However, the Milwaukee Common Council must enact an ordinance before a municipal fee can be placed on the tax roll as a special charge. The Common Council may also authorize new municipal fees, which it may then authorize to become special charges. Since 1995, Milwaukee has more than doubled the number of authorized special charges and enacted more than 50 city ordinances related to municipal fees and special charges (City of Milwaukee Clerk’s Office, 2011). The complexity of legal issues surrounding recent municipal fee additions is the subject of an ongoing Milwaukee Legislative Reference Bureau investigation.

Milwaukee has 26 types of municipal fees that can become special charges if they go unpaid.⁶ Twenty of these types of fees are active; 19 of them originate in the departments of Neighborhood Services, Public Works and Water Works and are active. Table 1 describes each of the 19 active fees originating in these three departments and includes the issuing department and information about the number and value of charges issued in 2010.

Water Works issued 75 percent of the total dollar value of special charges in 2010, the average charge ranging from \$360 to \$450. Neighborhood Services issued nearly 21 percent of the total dollar value of special charges, but its average charges ranged from \$100 to almost \$2,000. Public Works had the smallest percentage of special charges in 2010—roughly 4 percent. The average charge ranged from \$50 for bulky waste removal to more than \$850 for apartment garbage collection services.

Milwaukee's System for Municipal Fee Collection

Milwaukee's system for billing and collecting municipal fees is decentralized until the unpaid fees go onto the property tax roll, after which point the Treasurer collects these special charges with property taxes.⁷ Except for public utilities, which have statutorily set penalties for late payment (*Wis. Stat.* §66.0809(3) [2010]), city departments have considerable discretion in establishing billing and collection procedures. Our investigation of Milwaukee Water Works and the departments of Public Works and Neighborhood Services has shown that practices vary widely across departments and across individual fees administered within the same department.

Specifically, Water Works, Public Works, and Neighborhood Services diverge in their bill notification practices, late penalty issuance, and payment option practices. Bill notification refers to the type and frequency of notification departments send to people owing municipal fees. Late penalty issuance concerns the use of penalties for delayed payment and the use of administrative fees for special charges added to the property tax roll. Finally, payment option practices concern the availability of electronic or online payment methods. Table 2 shows the current collection practices by fee. For more detailed information about collection of municipal fees, see Appendix D.

⁶ These numbers exclude special charges for business and neighborhood improvement districts and for Wisconsin Department of Revenue charges and penalties, as these special charges do not derive from municipal fees.

⁷ Our analysis focuses on initial collection policies and rates. Please see Appendix C for information regarding the special charges collection process.

Table 1. Description of Special Charges

Department	Category	Description of Service	2010 Special Charges Statistics			
			Number of Charges	Value of Charges	Average Charge	Percentage of Total Special Charges
Neighborhood Services	Building Nuisance Abatement	Board-ups and fire cleanups	733	\$336,153	\$459	0.83%
	Special Privilege	Intrusions into city right-of-way (signs, sidewalk seating)	121	\$61,197	\$506	0.15%
	Covered Openings	Inspections of grates/trap doors	196	\$7,915	\$40	0.02%
	Condemned Building Razing	Demolition costs	59	\$112,365	\$1,904	0.28%
	Miscellaneous	Inspections, selected permit and registration fees	4,593	\$1,294,669	\$282	3.20%
	Fire Prevention Inspection*	For properties with three or more units	15,076	\$1,457,050	\$97	3.61%
	Health Abatement	Litter cleanup, some nuisance vehicle removal	2,968	\$1,050,636	\$354	2.6%
	Building Re-Inspection	Complaint-driven code violations	4,862	\$4,038,073	\$831	10.0%
Public Works	Tree Removal/Landscaping Encroachment		336	\$102,157	\$304	0.3%
	Snow Removal		1,394	\$160,010	\$115	0.4%
	Weed Removal	Lawn care	3,683	\$453,569	\$123	1.1%
	Garbage Cart Return	Five solid waste or recycling fines/fees	876	\$41,788	\$48	0.1%
	Sanitation	Skid referrals or bulk waste more than 1 cubic yard	572	\$30,440	\$53	0.1%
	Police Board-Ups	Securing buildings after forced police entry	1,344	\$398,857	\$297	1.0%
	Apartment Garbage Collection	For five-plus unit residential properties without private service	307	\$266,099	\$867	0.7%
Water Works	Delinquent Water Account		14,227	\$6,451,194	\$453	16.0%
	Delinquent Municipal Services Account	Solid waste, snow and ice removal, additional garbage cart	26,950	\$9,732,899	\$361	24.1%
	Delinquent Storm Water Account		19,224	\$7,800,776	\$406	19.3%
	Delinquent Sewer Account		16,813	\$6,584,703	\$392	16.3%

Source: Based on interviews with staff and calculated with data from Milwaukee Water Works and the Departments of Public Works and Neighborhood Services.

Bill Notification

Departments differ in bill notification practices. For example, Neighborhood Services sends a single invoice for three types of fees, a single letter for three other types of fees, and a mix of single invoices and letters for fees in its miscellaneous category. It does not send invoices or letters for its fire prevention inspection fee. To help understand the difference between Neighborhood Services letters and invoices, see examples in Appendix E. As shown, the letter does not request fee remittance or list a due date. In contrast, the invoice clearly lists a due date and requests that payment be returned in an enclosed envelope.

Public Works and Water Works are more uniform in their bill notification methods. Public Works sends invoices with due dates for all seven of its municipal fees, and it sends each invoice once except for apartment garbage collection fees, for which it sends invoices quarterly. After property owners receive Public Works bills, they are given 30 days in which to pay to avoid a penalty. Water Works sends quarterly invoices with due dates for the fees incurred by most of its customers, although large customers receive bills monthly.

Late Penalties

When property owners do not pay, departments take different approaches. Neighborhood Services does not issue late penalties for any of its fees, while Public Works issues one-time \$10 late penalties on all of its fees except police board-up and apartment garbage collection (neither of which receive penalties). Water Works issues quarterly 5 percent penalties on delinquent water accounts greater than \$100 and quarterly 3 percent penalties on unpaid sewer, storm water, and municipal services accounts greater than \$100. Only Water Works late penalties are recurring and compounding. The department places accounts more than six months and \$150 in arrears on the property tax roll and issues a 10 percent administrative fee for doing so. Only Water Works charges this administrative fee.

Table 2. Summary of Current Municipal Fee Collection Practices

Code	Fee	Department	Letter or Invoice?	Frequency of Notices	Late Penalty?	Admin. Fee?	Online Payment?
90	Building Nuisance Abatement	DNS	Letter	Once	No	No	No
91	Special Privilege	DNS	Invoice	Once	No	No	No
92	Covered Openings	DNS	Invoice	Once	No	No	No
94	Condemned Building Razing	DNS	Invoice	Once	No	No	No
96	DNS-Miscellaneous	DNS	Letter/ Invoice	Once	No	No	No
9B	Fire Prevention Inspection	DNS	None*	N/A	N/A	No	No
9C	DNS-Health Abatement	DNS	Letter	Once	No	No	No
9I	Building Re-Inspection	DNS	Letter	Once	No	No	No
95	DPW-Miscellaneous	DPW	Invoice	Once	\$10	No	No
97	Snow Removal	DPW	Invoice	Once	\$10	No	No
99	Weed Removal	DPW	Invoice	Once	\$10	No	No
8F	Garbage Cart Return	DPW	Invoice	Once	\$10	No	No
8V	Bulky Waste	DPW	Invoice	Once	\$10	No	No
9M	Police Board-Ups	DPW	Invoice	Once	No	No	No
9P	Apartment Garbage Collection	DPW	Invoice	Quarterly	No	No	No
93	Delinquent Water Account	MWW	Invoice	Quarterly/ Monthly	5%	10%	Yes
8S	Delinquent Municipal Services	MWW	Invoice	Quarterly/ Monthly	3%	10%	Yes
8T	Delinquent Storm Water Account	MWW	Invoice	Quarterly/ Monthly	3%	10%	Yes
9D	Delinquent Sewer Account	MWW	Invoice	Quarterly/ Monthly	3%	10%	Yes

Source: Based on interviews with staff from Milwaukee Water Works and the departments of Neighborhood Services and Public Works, and from the Milwaukee Water Works web site (see Milwaukee Water Works, 2011a).

Note: Water Works charges interest only on accounts with more than \$100 in unpaid charges. Water Works monthly invoices are only for large customers.

*Neighborhood Services does not notify property owners of the fire prevention inspection fee because the City allows the fee to be placed directly onto property tax bills (Administration and Enforcement ordinance [2010]).

Payment Options

Departments also differ in the payment options they offer. Water Works accepts online credit via its contractor, U.S. Bank (Milwaukee Water Works, 2011b). Public Works contracts with Caledon Card to offers online credit card payment options for parking tickets, but it does not offer the same service for municipal fees (City of Milwaukee Department of Public Works, 2011). DNS does not offer online payment for municipal fees.

The variation in billing, late penalty, and payment option methods across departments and fees creates considerable complexity in administration. One can imagine a situation in which a property owner, charged three different municipal fees receives three different notifications, is subject to three potential penalties, and has three payment options. Later in the report we will explore the effect of administrative processes on fee collection rates.

Factors Associated with Collection Rates

This section examines characteristics that may influence fee collection rates. We define collection rates as the number of fees paid in full prior to being placed on property tax bills, divided by the total number of fees issued. First, we look at characteristics of municipal fees based on the cause of the fee and property owner expectations. Second, we look at the characteristics of properties with special charges by assessment class, median property value, owner occupancy status, and aldermanic district. Third, we look at department processes and collection rates, specifically departmental use of invoices and late fees. For discussion of collection trends after fees become special charges, see Appendix F.

Characteristics of Fees

Property owners incur municipal fees for a variety of code violations, utility services, city inspections, special privileges, and miscellaneous reasons. The 19 fees we analyzed can be characterized by the basis for the fee—that is, the cause or grounds for the fee—and property owners’ expectations of the fee, namely whether he or she anticipates the fee. As the list below demonstrates, municipal fees can stem from city utilities, city services, minor violations, or blighted property conditions. These fees can be further characterized as expected or unexpected. Property owners can reasonably expect fees for utilities and city services, while fees for minor violations and blighted properties are typically unexpected.⁸

⁸ We exclude fees originating in departments other than Milwaukee Water Works and the Departments of Public Works and Neighborhood Services because these three departments account for more than 99 percent of special charges. We also exclude the Department of Neighborhood Services’ fire prevention inspection fee because it goes directly onto the property tax bill without prior notification.

Expected Fees by Category

Utilities

- Municipal services
- Storm water
- Water
- Sewer

City Services

- Apartment garbage
- Bulky waste
- DNS miscellaneous
- Sprinkler invoice
- Elevator invoice
- Fire prevention permits
- Projecting sign invoice
- Billboard invoice
- Boiler inspection invoice
- Covered opening
- Special privilege

Unexpected Fees by Category

Minor Violations

- Garbage cart
- Tree removal/encroachment
- DNS Miscellaneous
- Code complaint–city initiated
- Miscellaneous
- Fire inspection
- Residential rental inspection
- Residential rental inspection
no-entry
- Vacant building registration
- Recording enforcement
- Boiler posting
- Graffiti abatement
- Snow removal (sidewalk)
- Weed removal
- Health abatement (litter)
- Building re-inspection

Blighted Property

- Police board-ups
- Building nuisance abatement
- Condemned building razing

In general, property owners expect to receive bills for utilities, for services they request, and for required periodic inspections. Utility fees originate within Milwaukee Water Works and are billed to property owners on a quarterly basis. Utility fees include municipal services originating in Public Works, as well as storm water, water, and sewer accounts. City services fees are for services the property owner requests or mandatory safety inspections the City provides. Examples of these fees for city services include special garbage collection, permission for restaurants to put tables on public sidewalks, and elevator inspections. Property owners have some level of expectation that they will receive regular invoices and have to pay these fees, although fees for city services are generally invoiced with less frequency than utility fees.

In contrast, minor violation and blighted property fees are one-time or sporadic fees incurred for failure to comply with city ordinances. Property owners may incur minor violation fees if the City has to perform services that are the property owners' responsibility—for example, removing overgrown weeds or shoveling sidewalks—or if they violate ordinances or building codes. Blighted properties are a public safety hazard, and the City fines owners for having to board up or bulldoze these properties. Additionally, the City must charge for police board-ups, which occur under emergency conditions when police must forcibly enter a property and the City has to board up the entry. We include police board-ups

with blighted property charges because, although police board-ups do not pertain solely to blighted properties, the City handles them like other board-ups on abandoned or blighted properties. By and large, these fees are unexpected by property owners and irregularly issued by departments.

Characterizing fees by cause and expectation allows us to compare similar fees across departments and collection practices. We also use these characteristics to examine differences in collection rates and differences between properties with special charges and all other Milwaukee properties.

Collection rates vary widely by department, fee characteristics, and fee type.⁹ In 2010, just 8 percent of property owners receiving Water Works invoices had fees transferred to their property tax bills. Water Works makes up the greatest percentage of total municipal fees (75 percent) and thus collects a very high proportion of initial fees. In the same year, the departments of Neighborhood Services and Public Works combined made up roughly 25 percent of total fees and yet transferred special charges to the tax roll of more than 71 percent of the property owners they billed.

Collection rates can differ within departments. From 2007 to 2010, Public Works transferred only 7 percent of its fees for apartment garbage collection to the tax roll, 83 percent of weed removal fees, 94 percent of tree removal/encroachment fees, and more than 99 percent of police board-up fees. Water Works, technically a public-private enterprise, collected more than 80 percent of its fees. As an enterprise it is subject to revenue requirements that don't apply to Neighborhood Services or Public Works.

Collection rates also vary among similar fees. Table 3 shows the average collection rates for municipal fees by the cause of fee issuance. On average, 33 percent of snow removal fees are collected without becoming special charges, but 6.3 percent of tree removal/encroachment fees are initially collected. Similarly, 80 percent of special privilege fees are initially collected, but covered openings, a similar kind of fee, has only a 55 percent initial collection rate.

⁹ Our calculations do not take into account fees listed as having a status other than paid or assessed (placed on the property tax roll). We also exclude Neighborhood Services' fire prevention inspection fees. For more information, see Appendix A.

**Table 3. Average Collection Rates
by Fee Characteristic and Type, 2007-2010**

	Collection Rate
Delinquent Utilities	88.2%
8S Delinquent municipal service	82.8%
8T Delinquent storm water	88.8%
93 Delinquent water	90.9%
9D Delinquent sewer	90.0%
Minor Violations	15.4%
8F Garbage cart	33.6%
9I Building re-inspection	11.2%
95 Tree removal / encroachments	6.3%
96 DNS miscellaneous	28.3%
97 Snow removal	33.3%
99 Weed removal	17.4%
9C Health abatement (litter)	14.0%
City Services	57.6%
8V Bulky waste	28.2%
91 Special privilege	80.4%
92 Covered opening	55.0%
96 Miscellaneous	48.7%
9B Fire prevention inspection	0.0%
9P Apartment Garbage	93.0%
Blight	5.5%
90 Building nuisance abatement	19.9%
94 Condemned building razing*	49.2%
9M Police board-ups	0.05%

Source: Calculated using data from Milwaukee Water Works and the City's Departments of Public Works and Neighborhood Services.

* Razing collection rate is unique because DNS contracts with the private Kohn Collection Law Firm to collect some of the fees in this category. Since some accounts are referred to Kohn, fewer may be assessed on property tax bills in a given year.

Characteristics of Properties

Distinctions also exist among properties whose owners allow their municipal fees to become special charges and between these properties and Milwaukee as a whole. We examine properties that incur different special charges according to assessment class, average assessed property values, owner occupancy status, and aldermanic district.¹⁰

¹⁰ We calculated these results by merging fee-level data from individual departments with property-level data from the Master Property Record.

Assessment class

As shown in Table 4, different classes of properties incur different types of special charges. Seventy-nine percent of properties in Milwaukee are residential, but on average, a higher percentage of residential properties incur special charges. (The exception to this finding is properties with fees for city services that become special charges; only 23 percent of these properties are residential.) And while 7 percent of the properties in the City of Milwaukee are assessed as commercial and mercantile apartments (four or more units), these properties make up 8 to 15 percent of properties with unpaid minor violation, delinquent utility, and blight charges. Moreover, 19 percent of properties that have special charges due to unpaid city services fees are mercantile while almost 40 percent are commercial. This finding is not surprising given the nature of these fees for city services, which are often related to commercial-type activity like covered openings and special privileges.

**Table 4. Percentage of Properties per Assessment Class:
City of Milwaukee versus Properties with Special Charges 2007-2010**

	Residential	Commercial	Mercantile Apartments (4+ units)	Other*
All Milwaukee Properties	79%	4%	3%	13%
Properties with Minor Violation Charges	80%	9%	7%	3%
Properties with Blight Charges	81%	7%	7%	5%
Properties with Delinquent Utility Charges	89%	4%	4%	2%
Properties with City Service Charges	23%	40%	19%	18%**

Source: Calculated with data from Milwaukee Water Works and the departments of Neighborhood Services and Public Works merged with Master Property Record (MPROP) data.

*Other assessment classes include condominiums, manufacturing, special commercial, and tax-exempt properties. Percentages may not sum to 100 percent due to rounding.

**Ten percent of city service charges are classified as special commercial.

Table 4 demonstrates that properties with special charges (except those for delinquent utility fees) are more likely to be classified as commercial and mercantile apartments than Milwaukee properties on average. Additionally, it shows that properties with special charges stemming from unpaid fees for city services are much more likely to be commercial properties.

Median property values

Table 5 shows the average median property values from 2007-2010 for all Milwaukee properties and for properties with special charges, broken down by charge characteristic. The average median property value of properties with special charges stemming from fees for city services is more than \$300,000, which is significantly higher than properties with other special charges and Milwaukee properties in general. This finding reflects the nature of the original fee, namely that owners requested or were required to receive city services.

If fees for city services are excluded, we find that properties with special charges have lower assessed property values than the city average, which suggests that lower valued properties are more likely to incur special charges. In fact, Milwaukee properties with assessed values among the lowest 30 percent owe more than 50 percent of the City’s special charges.

**Table 5. Median Assessed Property Values:
City of Milwaukee versus Properties
with Special Charges, 2007-2010**

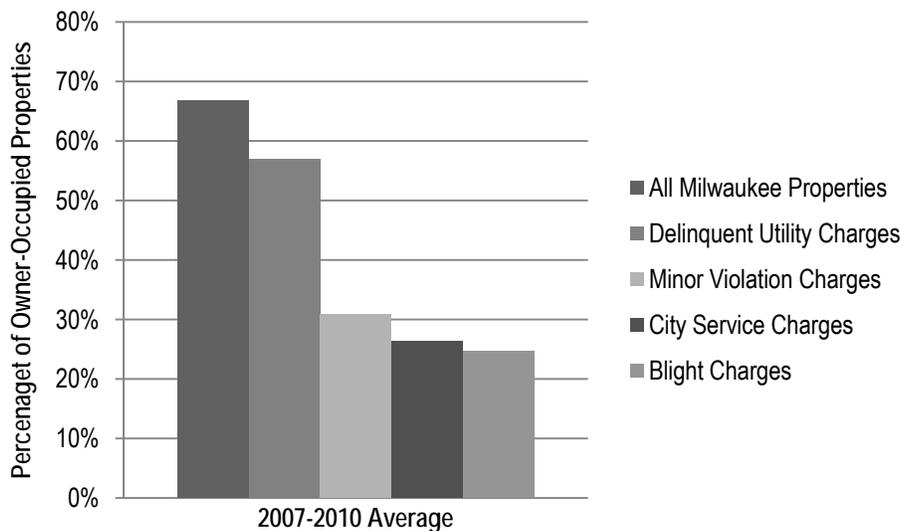
	Median Property Values
All Milwaukee Properties	\$115,375
Properties with Minor Violation Charges	\$88,125
Properties with Blight Charges	\$77,225
Properties with Delinquent Utility Charges	\$98,125
Properties with City Service Charges	\$314,450

Source: Calculated using data from Milwaukee Water Works, Public Works and Neighborhood Services merged with MPROP data.

Owner occupancy

As shown in Figure 4, on average, more than 66 percent of Milwaukee properties are owner-occupied. In contrast, properties with special charges have much lower rates of owner occupancy. With the exception of properties with delinquent utility charges, properties with special charges (minor violation, city service, and blight charges) are less than half as likely to be owner-occupied as the rest of Milwaukee properties. Properties with blight charges, which are more than 80 percent residential (Table 4), have 25 percent owner occupancy; this finding may be attributable to small-unit absentee landlords.

**Figure 4. Average Percentage of Properties Classified as Owner-Occupied
City of Milwaukee versus Properties with Special Charges 2007-2010**



Source: Calculated using data from Milwaukee Water Works and the departments of Public Works and Neighborhood Services merged with MPROP data.

Aldermanic district

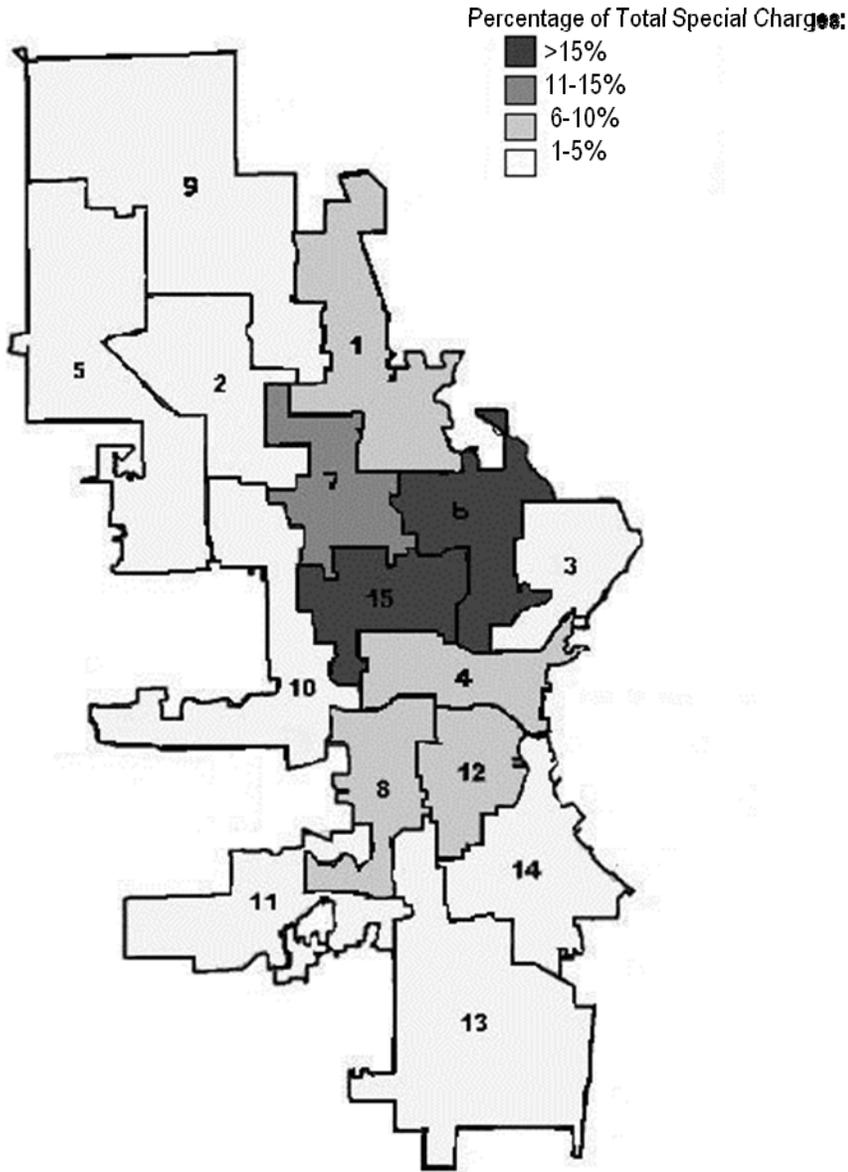
Finally, special charges vary by aldermanic district. As illustrated in Table 6 and Figure 5, districts 6, 7, and 15 contain more than 43 percent of all properties with special charges. Properties with special charges are concentrated in central Milwaukee, and the lowest incidence of special charges occurs in the outlying aldermanic districts.

**Table 6. Properties with Special Charges
and Value of Special Charges by
Aldermanic District**

Aldermanic District	Number of Properties with Special Charges	Percentage of Total Value of Special Charges
1	1,781	8%
2	1,046	3%
3	1,700	4%
4	1,594	6%
5	592	2%
6	3,753	16%
7	2,677	12%
8	1,431	7%
9	818	3%
10	857	3%
11	267	1%
12	2,336	9%
13	615	2%
14	881	4%
15	4,418	20%

Source: Calculated using data from the Treasurer's Office merged with MPROP data.

Figure 5. Total Value of Special Charges by Aldermanic District



Source: Map downloaded from City of Milwaukee website and filled using data from the Milwaukee Treasurer's Office.

Characteristics of Collection Practices

Different collection practices appear to influence collection rates. For example, multiple invoices are associated with higher collection rates than single invoices. For Public Works, the only type of fee with a multiple invoice—apartment garbage collection—has the highest departmental collection rate by a significant margin; only 7 percent of apartment garbage collection fees were added to tax bills as special charges, compared to the next best rate of 66 percent for garbage cart return fees and the 59 percent average Department of Public Works rate.

Late penalties also appear to affect collection rates. From 2007 to 2010 Water Works collected from more than 87 percent of its fees, all of which have a 5 percent late penalty for non-payment. Meanwhile, in the same time period Public Works initially collected on just more than 24 percent of fees with one-time \$10 late fees. From 2007 to 2010 Neighborhood Services and Public Works collected about 32 percent of fees without late fees.

Regression Analysis: Which Variables Explain Collection Rates?

The summary statistics laid out above indicate that fee, property, and collection variables may affect fee payment rates. For the purposes of actionable policy recommendations, the most important characteristics are the ones the City can control—collection practices such as billing type, late penalties issuance, and payment options. As shown by Table 7 below, these practices vary widely across and within departments, as do the corresponding collection rates.¹¹

Table 7. Collection Practices and Average Collection Rates, 2007-2010

Expected Fees					
Code	Fee	Dept.	Billing Type	Late Penalty?	Average Collection Rate
8V	DPW Bulky Waste	DPW	Invoice	\$10	28%
9P	Apartment Garbage Collection	DPW	Invoice ¹	No	93%
91	Special Privilege	DNS	Invoice	No	80%
92	Covered Openings	DNS	Invoice	No	55%
96	DNS-Miscellaneous ²	DNS	Some letter, some Invoice	No	36%
Unexpected Fees					
Code	Fee	Dept.	Billing Type	Late Penalty?	Average Collection Rate
8F	Garbage Cart Return	DPW	Invoice	\$10	34%
9C	DNS-Health Abatement	DNS	Letter	No	14%
9I	Building Re-Inspection	DNS	Letter	No	11%
9M	Police Board-Ups	DPW	Invoice	No	0.05%
90	Building Nuisance (DNS Board-Ups)	DNS	Letter	No	20%
94	Condemned Building Razing	DNS	Invoice	No	49%
95	Tree Removal / Encroachments	DPW	Invoice	\$10	6%
96	DNS-Miscellaneous ³	DNS	Invoice	No	36%
97	Snow Removal (Sidewalk)	DPW	Invoice	\$10	33%
99	Weed Removal	DPW	Invoice	\$10	17%

Source: Based on City of Milwaukee Assessor data and interviews with staff from the Departments of Neighborhood Services and Public Works.

¹ Quarterly invoice system² Includes sprinkler inspection, elevator inspection, fire prevention permits, projecting signs inspection, billboard inspection, boiler inspection

³ Includes code compliance, misc, fire inspection fee, residential rental fees, vacant building registration, recording enforcement, boiler posting, and graffiti abatement

¹¹ Public Works and Neighborhood Services have variability across charges, unlike Water Works. If there is no variability across charges within a department, we cannot separate the effects of any one practice from the aggregate effects of all departmental practices. Thus, we omit Water Works charges from the regression analysis.

To ascertain the effects of these characteristics, we examine property-level data for each fee from the departments of Neighborhood Services and Public Works. We obtained data on collection practices and individual fee amounts from the departments, drawing upon personal interviews and two departmental datasets. We gathered data on property characteristics from the Master Property Record (MPROP), maintained by the City of Milwaukee’s Information Technology Management Division. We merged Neighborhood Services, Public Works, and MPROP datasets to create a single database with each fee constituting a separate observation (thus some properties had multiple observations for each year). As a result, each observation includes a variable indicating whether the fee was paid before it was added to the property tax roll.

Regression Model Design

We attempt to explain the factors affecting whether a fee is added to the property tax roll—that is, we estimate the probability that a property owner pays a municipal fee before it becomes a special charge. We use a multivariate probit regression model to estimate this probability.¹² The dependent variable assumes a value of 0 if the fee was placed on the property tax roll and a value of 1 if it was paid in full and not placed on the property tax roll. The explanatory variables are characteristics of fees, properties, and collection practices.

Characteristics of collection

As our summary statistics indicate, the manner in which a fee is collected may have a highly statistically and economically significant effect on fee payment rates. Further, the City can control collection practices, whereas it cannot as easily control fee and property characteristics. We expect invoices to increase payment rates relative to letters, late penalties to increase payment rates relative to no late penalties, and a high variety of payment options to increase collection rates relative to low variety of payment options.

Characteristics of fees

Three fee characteristics may affect collection rates by affecting property owners’ ability to pay: 1) assessment year, (2) fee amount, and (3) frequency of correspondence. First, differences in year-to-year economic conditions may improve or diminish property owners’ abilities to pay municipal fees. The recent economic slowdown, for instance, could have caused lower fee payment rates. Second, the fee amount could affect a property owner’s ability to pay. We would expect that property owners would be less likely to pay larger fees. Third, the frequency of correspondence can affect collection rates by setting property owner expectations. As the City bills a property owner more frequently, that property owner develops routines for paying that fee. These routines—the expectations

¹² The model estimates: $\text{probability}(\text{payment} = 1 \mid \mathbf{X}) = \Phi(\mathbf{X}'\boldsymbol{\beta})$; where Φ is the cumulative distribution function of the standard normal distribution and \mathbf{X} is a vector of explanatory variables. The coefficients of the explanatory variables, $\boldsymbol{\beta}$, are estimated using maximum likelihood.

of payment—could make a fee more likely to be paid. In an interview, one city manager told us that some property owners accustomed to certain fees send checks *before* the expected fees are assessed.

Characteristics of properties

Property characteristics include the assessed property value, assessment class, land use, owner occupancy, owner in-state residency, aldermanic district, and history of tax delinquency. We predict that properties with higher property values generally have wealthier owners and fees issued against higher-value properties have higher fee payment rates. Among the other property characteristics, we hypothesize that owners will be more likely to pay on time and in full if they live in state, a rough proxy for absentee landlords. Further, we expect that if a property owner has a history of tax delinquency, he or she will be more likely to have delinquencies in the future.

We list the explanatory variables included in our regression in Table 8, which also defines the variables and summarizes our expectations for their effects on fee payment rates.

**Table 8. Variable Definitions,
Expected Marginal Effects on Probability of Payment, and Sources**

Variable	Definition	Expected Marginal Effect	Source
Late penalty dummy	Dummy variable = 1 if late payments for fee entail a \$10 late penalty = 0 otherwise	+	DNS & DPW
Expected invoice dummy	Dummy variable = 1 if fee was expected and collected with an invoice = 0 otherwise; effect measured relative to an unexpected fee collected with a letter	+	Authors
Expected fee dummy	Dummy variable = 1 if fee was expected = 0 otherwise	+	Authors
Condemned building razing dummy	Dummy variable = 1 if condemned building razing fee (only unexpected DNS fee collected with an invoice) = 0 otherwise; effect measured relative to an unexpected fee collected with a letter	+/-	DNS & DPW
Fire prevention permit dummy	Dummy variable = 1 if fire prevention permit fee (only expected DNS fee collected with a letter) = 0 otherwise; effect measured relative to an unexpected fee collected with a letter	+	DNS & DPW
Apartment garbage collection dummy	Dummy variable = 1 if apartment garbage collection fee (only fee assessed multiple times per year) = 0 otherwise; effect measured relative to other fee types	+	DNS & DPW
Tax delinquency	"The number of years for which [the property has] delinquent taxes due." ²	-	MPROP
Fee amount	Total amount of fee (nominal U.S. dollars)	-	DNS & DPW
Assessed property value	Current assessed property value per number of units (nominal U.S. dollars)	+	MPROP
Duplex dummy	Dummy variable = 1 if property's land use categorized as "duplex" in MPROP = 0 otherwise; effect estimated relative to single-family properties	+/-	MPROP
Multifamily dummy	Dummy variable = 1 if property's land use categorized as "multifamily" in MPROP = 0 otherwise; effect estimated relative to single-family properties	+/-	MPROP
Manufacturing dummy	Dummy variable = 1 if property classified as "manufacturing" in MPROP = 0 otherwise; effect estimated relative to "mercantile" properties	+/-	MPROP
Special mercantile dummy	Dummy variable = 1 if property classified as "special mercantile" in MPROP = 0 otherwise; effect measured relative to "mercantile" properties	+/-	MPROP
Owner occupancy dummy	Dummy variable = 1 if property occupied by owner = 0 otherwise	+	MPROP
Owner Wisconsin resident dummy	Dummy variable = 1 if property owner lives in Wisconsin = 0 otherwise	+	MPROP
Aldermanic district #X dummy	Dummy variable = 1 if property located in Aldermanic District #X = 0 otherwise; effect estimated relative to Ald. District #15	+/-	MPROP
Year 20## dummy	Dummy variable = 1 if fee issued in 20## = 0 otherwise; effect measured relative to assessment year 2007	+/-	DNS & DPW

² Quoted from the 2010 MPROP variable key, <http://itmdapps.milwaukee.gov/gis/oldmprop/MPROP2010DEC.zip>

Samples

The effects of our explanatory variables on payment rates may differ according to property class. Thus, we divide the 138,200 observations in our dataset into three distinct sample categories:

1. residential properties (89,238) ;
2. mercantile apartments (23,628); and
3. commercial properties (25,334).¹³

Residential properties are those with a “residential” assessment class, while mercantile apartments are properties with a “mercantile apartment” assessment class (four or more units). We define “commercial” as all non-residential property classified for assessment purposes as “mercantile,” “manufacturing,” or “special mercantile.” We form the categories above on the basis of grouping properties with similar incentive structures. For example, we believe residential property owners, consisting mostly of single-family homes, respond differently to fees than do owners of mercantile apartments.

In our three samples we only include fees issued from 2007 to 2010. The samples include all fees except for fire prevention inspection fees.

For each of the three samples, we estimate the effects of the two main collection practices—billing type (invoices and letters) and late penalty issuance—while controlling for the other explanatory variables listed in Table 8. Billing type and late penalty issuance are highly correlated across charges with a 0.76 correlation coefficient. Including both variables in the model would cause multicollinearity and prohibit us from obtaining accurate estimates of the effects of the two collection practices. Thus, we perform two separate sets of regressions, one estimating the effect of invoices and the other estimating the effect of late penalties. We discuss the results of these regressions below.

Results: Invoices

In examining the effect of a fee billed with an invoice instead of a letter, we analyze Neighborhood Services fees only. This allows us to better isolate the effects of invoices, because the only significant difference in Neighborhood Services collection practices was the use of letters or invoices. By comparison, *all* Public Works fees were invoiced. DNS is the only department that used two different billing types.

¹³ We do not analyze charges assessed to condominiums. Condominiums have highly variable ownership structures that do not facilitate categorical grouping. There are only 462 condominium observations.

Within Neighborhood Services fees, the expectedness of fees—defined as the fees property owners anticipate receiving prior to issuance—and the use of invoices are highly correlated. The correlation coefficient between these two variables is 0.93. Of the expected Neighborhood Services fees, more than 92 percent were billed via letters. Hence our inclusion of both the “invoice” variable and the “expected” variable in the same regression would generate multicollinearity and jeopardize the accuracy of our coefficient estimates. We attempt to avoid multicollinearity by estimating separate regressions for expected and unexpected Neighborhood Services fees. However, only two of the 259 expected residential Neighborhood Services fees used letters, although only 0.3 percent of 57,302 unexpected residential Neighborhood Services fees used invoices. This correlation is similarly high for mercantile apartments and commercial properties. Thus, there is not enough variability between these two sub-samples to generate reliable estimates.

We solve this problem by creating four interaction variables: an expected-invoice dummy, an unexpected-invoice dummy, an expected-letter dummy, and an unexpected-letter dummy (see Table 8 for variable definitions). Note that within DNS, the unexpected-invoice dummy only assumes a value of 1 for condemned building razing fees; and the expected-letter dummy only assumes a value of 1 for fire prevention permit fees. The other two interaction variables—expected invoices and unexpected letters—take on a value of 1 for multiple fees. In evaluating the effect of these dummy variables, we use unexpected-letter fees as the base category, as the majority of DNS fees are unexpected and the department uses letters for billing. Because the categories created by these interactions variables are mutually exclusive, we avoid multicollinearity.

We display in Table 9 the results of our analysis in which we control for invoices. For all samples, we are able to estimate the expected-invoice dummy’s marginal effect on probability of payment. We find that when the City sends expected invoices to owners of residential properties as opposed to unexpected letters, the estimated probability of payment increases by 25 percent. For commercial properties, the estimated effect of expected invoices also is noticeably higher, at 41 percent, and for mercantile apartments the estimated effect was lower, at 6 percent. All estimates are statistically significant.

Table 9. Regression Results: Invoices

Explanatory Variable	Residential Properties			Mercantile Apartments			Commercial Properties		
	Estimated Marginal Effect on Prob. of Payment ¹	Robust Standard Error		Estimated Marginal Effect on Prob. of Payment ¹	Robust Standard Error		Estimated Marginal Effect on Prob. of Payment ¹	Robust Standard Error	
Expected invoice	0.252 ***	0.0322		0.062 ***	0.0149		0.410 ***	0.0072	
Condemned building razing dummy	-0.096 ***	0.0204							
Fire prevention permit dummy				0.453	0.3121		0.516 ***	0.0142	
Tax delinquency (years)	-0.159 ***	0.0048		-0.072 ***	0.0093		-0.219 ***	0.0093	
ln(fee amount)	-0.010 ***	0.0014		0.011 **	0.0045		-0.031 ***	0.0041	
ln(assessed property value)	0.034 ***	0.0035		0.008	0.0053		0.007 **	0.0035	
Duplex dummy	-0.024 ***	0.0032							
Multifamily dummy	-0.050 ***	0.0072							
Manufacturing dummy							0.130 ***	0.0189	
Special mercantile dummy							0.030 ***	0.0112	
Owner occupancy dummy	-0.053 ***	0.0030							
Owner Wisconsin resident dummy				-0.005	0.0156		0.078 ***	0.0126	
Aldermanic district 1 dummy	0.017 **	0.0068		-0.013	0.0243		0.012	0.0191	
Aldermanic district 2 dummy	0.076 ***	0.0096		-0.001	0.0229		0.020	0.0222	
Aldermanic district 3 dummy	-0.012	0.0086		0.101 ***	0.0308		0.142 ***	0.0197	
Aldermanic district 4 dummy	-0.023 ***	0.0080		0.002	0.0212		0.114 ***	0.0186	
Aldermanic district 5 dummy	0.008	0.0115		-0.049 *	0.0225		0.022	0.0241	
Aldermanic district 6 dummy	-0.004	0.0049		0.055 **	0.0276		-0.049 ***	0.0159	
Aldermanic district 7 dummy	0.012 **	0.0053		0.059 **	0.0310		0.021	0.0204	
Aldermanic district 8 dummy	-0.006	0.0067		0.008	0.0251		0.033 *	0.0185	
Aldermanic district 9 dummy	0.024 **	0.0106		-0.057 **	0.0212		-0.051 *	0.0221	
Aldermanic district 10 dummy	0.040 ***	0.0100		0.032	0.0329		0.059 ***	0.0207	
Aldermanic district 11 dummy	-0.003	0.0160		-0.052	0.0299		0.023	0.0300	
Aldermanic district 12 dummy	-0.011 *	0.0060		-0.008	0.0214		0.042 ***	0.0160	
Aldermanic district 13 dummy	0.050 ***	0.0134		0.001	0.0361		0.035	0.0224	
Aldermanic district 14 dummy	0.001	0.0093		0.066 *	0.0398		0.038 **	0.0187	
Year 2008 dummy	0.057 ***	0.0051		0.046 ***	0.0155		0.012	0.0102	
Year 2009 dummy	0.089 ***	0.0052		0.063 ***	0.0154		0.007	0.0104	
Year 2010 dummy	0.024 ***	0.0049		0.087 ***	0.0157		0.024 **	0.0103	

Number of observations:	57,559	5,919	20,304
Pseudo R-squared	0.090	0.045	0.263
Observed collection rate:	18.0%	15.6%	38.2%

*** coefficient estimate significant at 1% level ¹ For non-binary variables, marginal effects were evaluated at sample means.
 ** coefficient estimate significant at 5% level Note: Samples only included DNS and DPW fees assessed from 2007-2010.
 * coefficient estimate significant at 10% level

Characteristics of fees and collection

For all samples, our model estimates that the use of expected invoices increases the probability of payment. Residential property owners are 25 percent more likely to pay fees issued by invoices than they are fees issued by letter. Similarly, the estimated probability of payment for expected invoices billed to commercial properties increases by 41 percent, and the estimated probability of payment for expected invoices billed to mercantile apartments increases by 6 percent. All of these estimates are statistically significant.

Our model estimates that property owners are 10 percent less likely to pay a condemned building razing fee—the only unexpected fee billed by invoice within Neighborhood Services—than any unexpected fee billed by letter. For condemned building razing fees, the total estimated effect combines two characteristics: the fee type and the collection procedure. Because we can only estimate the total effect, however, the coefficient estimate for the condemned building razing dummy variable does not allow us to deduce the impact of expectedness.

Our model estimates that fire prevention permits, the only expected fee billed by letters, have a statistically significant effect on fee payment rates for commercial properties only. The magnitude of this effect is high—a more than 50 percent increase in the probability of payment. Because fire prevention permits are granted to properties that store hazardous or flammable materials, this high estimated effect may result from the importance of these permits to commercial operations.

Controlling for the effects of invoices and letters, our model generates statistically significant effects for two other fee characteristics—fee amount and assessment year. A 1 percent increase in the fee amount slightly increases the probability of payment for residential and commercial properties and slightly decreases the probability of payment for mercantile apartments. Fee amounts, therefore, do not have uniform effects across our samples. Relative to the 2007 assessment year, our model estimates that fees assessed in 2008 through 2010 have a higher probability of payment—a surprising inference given the economic downturn that occurred during those years.

Characteristics of properties

Our model estimates that assessed property value generally has a small but positive effect on the probability of payment. For residential properties, our regression estimates that a 1 percent increase in the assessed property value increased the probability of payment by 3.4 percent; whereas for commercial properties, a 1 percent increase in the assessed property value increased the probability of payment by 0.7 percent. Estimates of this variable are statistically significant only for residential and commercial properties.

Our model estimates owners of duplexes and multifamily (non-mercantile apartment) dwellings—both contained within the residential properties sample—are slightly less likely to pay user fees than owners of single-family properties. Within the commercial properties sample, owners of properties characterized as manufacturing and special mercantile are significantly more likely to pay their fees in a timely fashion than owners of mercantile properties.

Our model estimates that owners who occupy their residential properties are 5.3 percent less likely to pay than owners who do not live in the residential properties they own. Controlling for property values, perhaps the owners of non-owner-occupied residential properties may have had less financial stress than the

owners of the equivalently valued owner-occupied residential properties. Owners of owner-occupied properties may have been more likely to over-extend themselves in securing financing for their property purchase.

Also of note, commercial properties with owners living in Wisconsin are 7.8 percent more likely to pay than owners of commercial properties who live outside Wisconsin. Perhaps this finding captures the effects of owners who leave the state and allow the City foreclose on their property.

Across property classes, about half of the aldermanic district variables are found to be significant. For both statistically significant negative and positive effects, an examination of demographic characteristics across aldermanic districts did not indicate a relationship between payment rates and income, education, or race characteristics of the aldermanic districts (City of Milwaukee Information Technology Management Division, 2011). However, further study is needed to gauge the relationship of specific demographic characteristics of aldermanic districts and payment rates.

Last, our model finds that having an additional year of delinquent taxes decreased the probability of fee payment by a fee-weighted average of 17 percent. Clearly, owners with a history of tax delinquencies are less likely to pay municipal fees than those without a history of tax delinquencies.

Results: Late Penalties

To better isolate the effects of late penalty issuance on fee payment rates, we limit our analysis to fees that the department tries to collect via invoice. From 2007 to 2010, Neighborhood Services invoiced some of its fees, and Public Works invoiced all of its fees. By eliminating fees billed by letter, we control for billing type, which we showed in the previous section affects payment rates. Meanwhile, Public Works used late penalties for the majority of its fees, and Neighborhood Services did not use late penalties for any of its fees. We combine Neighborhood Services and Public Works data to analyze the effects of these differences late penalties.

Additionally, we control for the effect of one particular fee: apartment garbage collection. Apartment garbage collection fees are unique because users receive these fees quarterly, instead of just once per year. Including a dummy variable indicating whether a fee is apartment garbage collection allows us to avoid conflating our results with differences in frequency of correspondence.

As with our analysis of invoices, the use of late penalties is overall significantly correlated with fee expectedness. However, this multicollinearity does not affect fees in all three samples. For fees against residential properties, the correlation coefficient between a fee being expected and using a late penalty was only 0.15. Thus, for residential properties we are able to include both the expected and late

penalty variables in our regression. For mercantile apartments and commercial properties, the correlation between late penalties and expectedness is high, with correlation coefficients of -0.74 and -0.76, respectively. Therefore, for these properties we run separate regressions on expected and unexpected fees. Unlike in our attempt to run separate regressions on expected and unexpected fees in the analysis of invoices, there is sufficient variability with expectedness of fees with and without late penalties to permit regression analysis within these two sample categories. Table 10 illustrates the results for our analysis of late penalties.

Our regression model generates several statistically significant results for fee, property, and collection characteristics. Importantly, the effects of using late penalties have statistically significant effects on payment rates for residential, mercantile, and commercial properties. The explanatory power of the models is overall significantly better than the models we use to analyze invoices, perhaps because late penalties have a stronger impact on collection rates than invoices. Explanatory power is highest for mercantile and commercial properties with unexpected charges; the pseudo r-squared estimates range from 0.13 to 0.25. The sample of Neighborhood Services fees issued to residential properties is the largest with 31,805 observations; while Neighborhood Services fees against commercial properties total about 16,000, and Neighborhood Services fees against mercantile apartments total about 3,300.

Characteristics of collection

For four of the five samples examined, our regressions estimate that late penalties have a large positive effect on the probability of fee payment, ranging from 17 to 29 percent. These effects are statistically significant for nearly all samples; only for expected fees issued against commercial properties do late penalties fail to have a statistically significant effect. By comparison, for expected fees issued against mercantile apartments, late fees do appear to encourage payment of municipal fees—although to a slightly lesser extent than for unexpected fees. At the same time, the only expected fee with a late penalty was the bulky waste fee, meaning we cannot completely separate the effects of fee characteristics from late penalties for this particular fee.

Table 10. Regression Results: Late Penalties

Explanatory Variable	Residential Properties			Mercantile Apartments				Commercial Properties			
	Est. Marginal Effect on Prob. of Payment ¹	Robust Standard Error	Expected Charges		Unexpected Charges		Expected Charges		Unexpected Charges		
			Est. Marginal Effect on Prob. of Payment ¹	Robust Standard Error	Est. Marginal Effect on Prob. of Payment ¹	Robust Standard Error	Est. Marginal Effect on Prob. of Payment ¹	Robust Standard Error	Est. Marginal Effect on Prob. of Payment ¹	Robust Standard Error	
Late penalty dummy	0.171 ***	0.0043	0.183 ***	0.0500	0.212 ***	0.0162	0.019	0.0906	0.291 ***	0.012	
Expected charge dummy	0.051 ***	0.0071									
Apt. garbage collection dummy	0.806 ***	0.0349					0.391 ***	0.0075			
Tax delinquency (years)	0.003	0.0027	-0.119 ***	0.0292	-0.060 ***	0.0148	-0.248 ***	0.0227	-0.017 ***	0.003	
ln(fee amount)	-0.070 ***	0.0028	-0.032	0.0218	-0.066 ***	0.0091	-0.066 ***	0.0058	-0.019 ***	0.007	
ln(assessed property value)	0.018 ***	0.0040	0.053 ***	0.0123	-0.020 ***	0.0088	0.014 ***	0.0048	0.001	0.005	
Duplex dummy	-0.023 ***	0.0044									
Multifamily dummy	-0.0308 ***	0.0098									
Manufacturing dummy							0.156 ***	0.0186	0.042	0.053	
Special mercantile dummy							0.046 ***	0.0148	0.085 ***	0.021	
Owner occupancy dummy	-0.050 ***	0.0041									
Owner Wisconsin resident dummy			0.136 ***	0.0270	-0.031	0.0263	0.135 ***	0.0210	0.028 *	0.015	
Aldermanic district 1 dummy	0.006	0.0099	0.094	0.1035	0.063	0.0561	0.030	0.0249	0.029	0.038	
Aldermanic district 2 dummy	0.068 ***	0.0130	-0.014	0.0859	0.038	0.0428	0.080 ***	0.0269	0.014	0.030	
Aldermanic district 3 dummy	0.105 ***	0.0153	0.029	0.0767	0.121 **	0.0641	0.189 ***	0.0170	0.190 ***	0.050	
Aldermanic district 4 dummy	-0.003	0.0126	0.111	0.0818	0.102 **	0.0542	0.169 ***	0.0185	0.016	0.031	
Aldermanic district 5 dummy	0.052 ***	0.0155	-0.158 **	0.0365	0.073	0.0684	0.055 *	0.0278	0.041	0.044	
Aldermanic district 6 dummy	0.012	0.0080	0.105	0.0973	-0.031	0.0369	-0.042 *	0.0225	0.028	0.029	
Aldermanic district 7 dummy	0.017 **	0.0083	0.164	0.1309	0.025	0.0470	0.055 **	0.0251	0.013	0.034	
Aldermanic district 8 dummy	0.070 ***	0.0107	0.265 ***	0.1179	-0.026	0.0305	0.095 ***	0.0206	0.035	0.033	
Aldermanic district 9 dummy	0.026 **	0.0128	-0.201 ***	0.0280	0.033	0.0519	-0.218 ***	0.0433	0.135 ***	0.052	
Aldermanic district 10 dummy	0.081 ***	0.0134	-0.037	0.0845	0.191 ***	0.0736	0.114 ***	0.0212	0.073 **	0.040	
Aldermanic district 11 dummy	0.165 ***	0.0214	-0.035	0.0837	0.139 ***	0.0673	0.071 *	0.0349	0.111 **	0.057	
Aldermanic district 12 dummy	0.052 ***	0.0105	0.148 *	0.0985	0.036	0.0425	0.082 ***	0.0184	0.020	0.025	
Aldermanic district 13 dummy	0.081 ***	0.0163	-0.103	0.0643	0.060	0.0559	0.038	0.0281	0.038	0.032	
Aldermanic district 14 dummy	0.105 ***	0.0143	0.142	0.1192	0.063	0.0605	0.109 ***	0.0202	0.040	0.033	
Year 2008 dummy	0.001	0.0068	0.038	0.0352	-0.013	0.0186	0.019	0.0126	-0.006	0.018	
Year 2009 dummy	0.044 ***	0.0071	0.042	0.0363	-0.011	0.0189	0.014	0.0128	0.020	0.019	
Year 2010 dummy	0.045 ***	0.0068	0.145 ***	0.0424	0.017	0.0212	0.031 **	0.0126	0.065 ***	0.021	
Number of observations:	31,805		1,156		2,151		12,894		3,036		
Pseudo R-squared	0.150		0.132		0.249		0.160		0.233		
Observed collection rate:	19.3%		23.4%		19.9%		61.9%		21.2%		

* coefficient estimate significant at 10-percent level ** coefficient estimate significant at 5-percent level *** coefficient estimate significant at 1-percent level
¹ For non-binary variables, marginal effects were evaluated at sample means. Note: Samples only included DNS and DPW fees assessed from 2007-2010.

Characteristics of fees

Similar to our invoices regression, our late penalty model estimates that higher fees generally decrease probability of payment. A 1 percent increase in the fee amount decreases the probability of payment by 7 percent for residential fees, unexpected mercantile-apartment fees, and expected commercial-property fees—which together formed 92 percent of the total fees examined in the five samples. Seven percent is a rather large effect on payment probability for a mere 1 percent increase in the fee amount. While our invoice regression does not return estimates of the same magnitude, both models confirm that fee amount is an important variable in explaining payment rates of municipal fees.

The assessment year also has a strong estimated effect in the late penalty regression. However, the estimates indicated that fees assessed in 2008 through 2010 are more likely to be paid than fees assessed in 2007, a result also seen in the invoices regression. Thus, we cannot attribute temporal effects to broad macroeconomic indicators, but we caution that our 2007 observations may capture the beginnings of the property market collapse.

While we have to separate expected and unexpected fees for commercial and mercantile properties, our late penalties model can estimate the effect of a fee being expected for residential properties—by far the largest of our samples. Our model finds that, for residential properties, expected fees are 5 percent more likely to be paid. While an overall 5 percent increase is not trivial, it is small in comparison to the marginal effects of the fee amount.

Finally, our model estimates that residential properties and commercial properties receiving expected fees are, respectively, 81 and 39 percent more likely to pay an apartment garbage fee than other fees. These estimated effects are unsurprisingly the highest of all explanatory variables, confirming our expectation that property owners are more likely to pay fees assessed quarterly (rather than non-routinely). For fees assessed against mercantile apartments, we are unable to estimate the effect of the apartment garbage fee dummy as a result of its high correlation with late penalties. Nonetheless, frequency of correspondence appears to affect payment probability.

Characteristics of properties

As with the regressions analysis for invoices, our models analyzing late penalties estimate that assessed property value generally has a positive effect on the probability of fee payment. For fees against residential properties and expected fees against commercial properties, our model finds that 1 percent higher property values equated to about a 1.5 percent greater likelihood of payment. Within mercantile apartments, the estimated effect varies—5 percent increase in payment probability for expected fees and 2 percent decrease in payment probability for unexpected fees. Given these estimated effects are for a 1 percent increase in assessed property value, the estimates are very large.

Generally, owners of higher-value properties appear more likely to pay municipal fees, and these estimated effects are overall higher in the late penalty regressions than in the invoice regressions.

Controlling for late penalties, the effects of property ownership on probability of payment are similar to the invoice regressions. Owners of duplex and multifamily properties are 3 and 5 percent less likely to pay fees, respectively, than single-family property owners. Within commercial properties, owners of manufacturing and special mercantile are 16 and 5 percent more likely to pay fees, respectively, than are owners of mercantile properties. Additionally, our model estimates that owners of mercantile apartments and commercial properties, those living in Wisconsin are 14 percent more likely to pay expected municipal fees. This result may capture the effects of properties owners who leave the state and allow the City to foreclose on neglected property.

Of particular note, owner-occupied properties are associated with a payment probability 5 percent less than non-owner-occupied properties—approximately the same estimated effect as in the regression controlling for invoices. This repeated estimate leads us to believe owner-occupied residential properties are generally less likely to pay municipal fees. As mentioned, we hypothesize that this may be related to the financial stress of owner-occupied properties relative to similarly valued non-owner-occupied properties.

In the late fee regression, the aldermanic district dummy variables are most significant for residential properties and expected fees for commercial properties. Some estimates for particular districts significantly differ across our invoice and late penalty regressions, and our examination of demographic characteristics across aldermanic districts does not indicate a relationship between payment rates and the income, education, or race characteristics of the aldermanic districts. We again recommend further study to gauge the relationship of specific demographic characteristics of aldermanic districts and payment rates.

Unlike in the regression controlling for invoices, for the late penalties regression, a history of tax delinquency is not estimated to have a significant effect on the probability of payment of fees issued against residential properties. However, for fees issued against non-residential properties, our model estimates that properties with a history of tax delinquency are significantly less likely to pay fees. This corroborates our hypothesis that non-payment may be a recurring problem for some property owners.

Policy Options for Increasing Collection Rates

The City of Milwaukee possesses several tools for addressing problems associated with unpaid municipal fees. Drawing upon our data analysis, interviews with city managers in and outside Milwaukee, and local and national best practices reports, we present three policy options that may improve the City's initial collection procedures. Although an evaluation of cost-effectiveness is beyond the scope of this report, we can broadly predict relative administrative costs across the options we propose. For relatively low anticipated administrative costs, Milwaukee could mail invoices with due dates for all fees. For somewhat higher administrative costs, Milwaukee could issue late penalties for all unpaid fees and/or offer online payment options for all fees. Although each alternative imposes administrative costs, the City would benefit from substantial savings that might outweigh the associated costs, if the change proved effective in reducing the number and value of special charges,

Mail invoices with due dates for all fees. Only the Department of Neighborhood Services sends letters of notification without payment due dates, but it sends these letters for 31 of the 41 fees it issues. Because of the strong relationship between invoice issuance and charge characteristics—in particular, whether or not a charge is expected—in the Department of Neighborhood Services, our regression analysis is inconclusive regarding the precise effect of invoices on on-time fee payment. Nonetheless, invoices are associated with higher collection rates than letters, indicating that due dates may have a positive effect on payment of municipal fees prior to placement on the property tax bill. It makes sense that property owners would be more likely to pay a fee in a timely manner with a due date than without, and the City could likely implement this change for a small administrative cost. Adding due dates to the Neighborhood Services letter template would take minimal time and resources and would set the stage for late penalties if property owners failed to pay by the due date.

Issue late penalties for all unpaid fees. Neighborhood Services does not issue late penalties for any of its fees. Public Works issues \$10 penalties for all but two fees. Water Works issues 3 percent penalties for three fees and 5 percent penalties for one fee. Our regression model estimates a strong relationship between late penalties and fee payment. While our regression model does not allow us to definitively infer causality, it suggests that issuing late penalties for unpaid fees would significantly increase collection rates. At the same time, costs are likely to be higher than for the invoice option, as late penalties would likely require changes to department accounting systems and higher printing and mailing costs. The City should also consider potential effects of new penalties on city revenues and on low-income property owners.

Offer credit card payment options for all fees. Because only Water Works offers credit card payment options for municipal fees, we were unable to include payment options as variables in our regression. Nonetheless, anecdotal evidence

suggests that offering credit card payment options may increase collection rates. According to a survey of municipalities from the Wisconsin Legislative Audit Bureau (2004), “offering a variety of payment options provides flexibility and convenience to payers of user fees and may increase a local government’s ability to collect revenue...in some communities, the availability of on-line payment capability resulted in payments the community did not expect to receive.” Further, credit card convenience fees can be passed on to property owners, and vendors manage most of the additional processing. Because the Department of Public Works already offers credit card options for parking tickets, expansion within the department should be feasible. However, the costs associated with contracting out to a vendor may be higher than the costs associated with issuing invoices or late penalties within departments.

Suggestions for Further Analysis

A comprehensive analysis of municipal fees and special charges in Milwaukee would involve conducting a trend analysis and cost-effectiveness study. The trend analysis would provide the basis for predicting fee issuance and collection rates over time, helping Milwaukee to make well-informed budgeting decisions. The cost-effectiveness study would allow the City to weigh the predicted effects of different collection practices against the costs of implementation. Both the trend analysis and cost-effectiveness study would require improved data maintenance across departments in order to track individual fees through their entire life cycle. The cost-effectiveness study would also require detailed information on actual and predicted costs.

For both a trend analysis and the cost-effectiveness study, we would need to be able to track a fee from its initial billing to its final payment, regardless of whether the fee goes onto the property tax bill. Currently, not all departments document initial billing dates, making it difficult to determine the beginning of the fee life cycle. Additionally, once fees are placed onto property tax bills as special charges, their payment is difficult to track; current data provide only a snapshot of unpaid special charges that were issued in a specific year and are still outstanding today. To remedy this problem, the City of Milwaukee should require departments to register each billing and payment event for each fee issued.

A complete analysis would also evaluate fees that are removed from the system for reasons other than payment. Currently, many fees are dropped from the Neighborhood Services and Public Works collection systems and recorded as “cancelled,” “closed,” “bankrupt,” “foreclosed,” and “hardship” without clear coding definitions. Staff members entering the data sometimes use the terms “closed” and “cancelled” for fees that are mistakenly charged and other times to indicate that the owner has fixed the problem independently. Additionally, departments that give fee exemptions or reductions for owners deemed to have financial “hardship” record this information ambiguously. It is often unclear whether owners whose fees have a status of “hardship” have received city services at all and whether these fees have been forgiven or reduced. Moreover, if “hardship” property owners do have to pay fees, there is no documentation indicating whether they pay. To address these concerns, the City of Milwaukee should implement a uniform coding protocol.

A cost-effectiveness study would weigh predicted policy effects against the costs of policy adoption and implementation. While data maintenance improvements would help the City better predict policy effects, extensive data gathering may be necessary to evaluate actual and predicted costs. Costs include work hours spent by staff in fee-issuing departments to issue, collect, and track fees, as well as financial costs associated with printing, mailing, and updating accounting systems. They also include work hours and financial

costs for the Comptroller's Office, which certifies special charges; the Assessor's Office, which transfers special charges to tax bills; and the Treasurer's Office, which collects special charges along with property taxes and any other assessments on the property tax bill. Before the City decides to implement any collection policy option, it should evaluate these and any other associated costs.

Conclusion

In the City of Milwaukee, unpaid municipal fees that end up on property tax bills as special charges have been increasing in number and dollar value in recent years. This report finds that nonpayment is associated with characteristics of fees, characteristics of properties, and characteristics of collection practices. Because the City can affect collection practices with policy decisions, we try to identify the collection practices that have the greatest impact on collection rates. Our regression analysis indicates that late penalties in particular may have a positive impact on collection rates. We recommend that the City of Milwaukee undertake a more comprehensive evaluation of its fee collection system and find the most cost-effective way to maximize collection rates. It is our hope that our data and process analysis helps the City position itself for the improvement of its municipal fee collection policies.

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Appendix A. Data Collection and Limitations

To complete the data analysis in this report, we used accounts receivable data from the Departments of Neighborhood Services (DNS) and Public Works (DPW), and Milwaukee Water Works (MWW) for years 2007 through 2010. We merged this with Milwaukee Master Property Record (MPROP) data for the same years to examine property owner characteristics of those who incurred municipal fees and special charges. We also used aggregate data from the Assessor’s Office on special charges and current Office of the Treasurer data to examine trends of property owners who had special charges on their tax bills. Table A1 illustrates the data sources we used for different phases in the municipal fee process—that is, before, during, and after placement on property tax bills.

Table A1. Data Sources Arranged by Phase in Collection Process

Municipal Fees Initial departmental billing	<ul style="list-style-type: none"> • DNS & DPW accounts receivable data (individual charge level) 2007-2010 • MWW data (charge category aggregate level) 2007-2010 • MPROP data (property tax key level) 2007-2010
Placement on Tax Roll Transition from departments to Treasurer via Assessor	<ul style="list-style-type: none"> • DNS, DPW, & MWW accounts receivable data (individual charge level) 2007-2010 • MPROP data (property tax key level) 2007-2010 • Assessor’s data for all special charges (charge category aggregate level) 2004-2010 • Treasurer’s data for properties with outstanding special charges (property tax key level) 2010
Special Charges Treasurer collection of special charges with property taxes	<ul style="list-style-type: none"> • Treasurer’s data for properties with outstanding special charges (property tax key level) 2007-2009

Source: Authors.

Creating Our Dataset

We narrow our dataset in two ways. First, we limit our analysis to 2007 through 2010 because our data are most complete and consistent over those four years. Second, we limit our analysis to fees labeled “paid” and “assessed” because other statuses are used inconsistently and are often poorly defined.

Years

We limit our analysis to tax years 2007 through 2010 to analyze the municipal fee process and to 2004 to 2010 to understand general special charge trends. We limit our specific analysis to 2007 to 2010 for the following three reasons. First, Milwaukee’s Common Council authorized many municipal charges to be placed on the tax roll as special charges from 1995 to 2007, but it has not approved any new authorizations since. Second, Water Works divided the sewer fee into two fees in 2004 and added a third fee category in 2006. Third, DPW-Sanitation special charges were authorized in 2007. We limit our general special charge trend analysis to 2004 to 2010 because we lack data on the number of sewer and water special charges for tax years 2001 through 2003.

Status

We limit our analysis to fees with status labels of “paid” (paid in full) and “assessed” (placed on the property tax roll as special charges). However, we found 14 labels indicating a fee’s status. Our understanding is that some of these labels indicate that a fee record has been closed and some of these labels indicate that the record is still open. However, departments do not always use these labels in a uniform or specified way. Below is a list of these status labels.

Open	Closed
Issued	Paid
Pending	Assessed
Active	Closed
Dispute	Cancelled
Noticed	Released
Billed	Bankrupt
	Foreclosed
	Hardship

Open Status. We exclude all fees with open status labels from our analysis. There is little information regarding why a department would leave a municipal fee that is still outstanding after a year in the accounting system when it could be placed on the property tax roll. Additionally, the distinctions between “active,” “noticed,” and “billed” fees are unclear.

Closed Status. We exclude all closed status labels other than “paid” and “assessed” from our analysis. A large portion of fees is labeled as “closed,” “cancelled,” or “released,” though the distinctions among these labels is unknown. In two Public Works fee categories, more than 40 percent of the records were listed as “closed.” Public Works uses the label “hardship” for fees received by property owners registered as eligible for reduced penalties and fees due to financial hardship. However, the database typically does not specify whether property owners actually receive fees and, if so, whether the fees are paid or assessed. A much smaller proportion of fees in both the Public Works and Neighborhood Services datasets are labeled as “bankrupt” or “foreclosed.” Though the definition of these labels is clear, we exclude them from our analysis because we assume that these financially distressed property owners are different from other property owners incurring fees.

Treasurer Data Limitations

There are two important limitations with tracking and analyzing the special charges once placed on the property tax roll. First, the Milwaukee Treasurer’s Office only tracks outstanding charges and removes paid or dropped charges from its records. Because we cannot disentangle paid charges from dropped charges, we cannot track special charge payments over time. We can, however, look at characteristics of nonpayment. Second, the Treasurer’s Office database does not merge outstanding special charges over time—that is, unpaid municipal fees in

2007 are listed as special charges for 2007, and unpaid municipal fees in 2008 are listed as special charges for 2008. The 2007 special charges are not merged with special charges for 2008; thus, we can't directly compare unpaid charges across years. This arrangement prohibits us from describing trends in special charges over time or making predictions of special charges.

Assessor Data Limitations

Other than for the year 2010, data from the Assessor's Office is only available to in aggregate form, not at the individual charge level. Therefore, while we used Assessor data to generate aggregate statistics on special charges, we employed department-level accounts receivable data for our regression analysis on collection rates—a task that required a refined level of detail.

Water Works Data Limitations

In 2010, Water Works billed more than \$180 million in property-related municipal fees to around 150,000 accounts. While we received abundant, micro-level information on four years of special charges (those unpaid charges sent to the tax roll), we received only aggregate information for overall Water Works municipal fees, due to the massive size of Water Works' client population. This meant that we were unable to identify trends among property owners who paid their Water Works fees in advance of the property tax bill. However, we were able to evaluate property owner characteristics for those Water Works clients who had been assessed special charges.

Public Works and Neighborhood Services Data Limitations

Municipal fee data collection practices vary among and within departments. Departments use different software packages for data management and billing, which results in datasets being structured differently. Also, department staff members collect different transactional information for different types of fees, define fields differently, and use different terminology for common procedures without documentation. For example, Neighborhood Services does not use a unique field to record payment date, and, although Water Works likely collects payment date information, our Water Works data did not include it. In some Public Works data files, personal check dates are used as proxies for payment dates, and in others, payment date information is unavailable. These inconsistencies make it difficult to track individual fees over their life cycle.

Appendix B. Revenue Sources for the City of Milwaukee

Like many other U.S. municipalities, Milwaukee has been trying to decrease its reliance on the property tax while facing severe fiscal challenges. Unlike municipalities in many other states, however, Milwaukee faces a statutory prohibition against imposing significant local taxes other than the property tax (City of Milwaukee Comptroller, 2007).

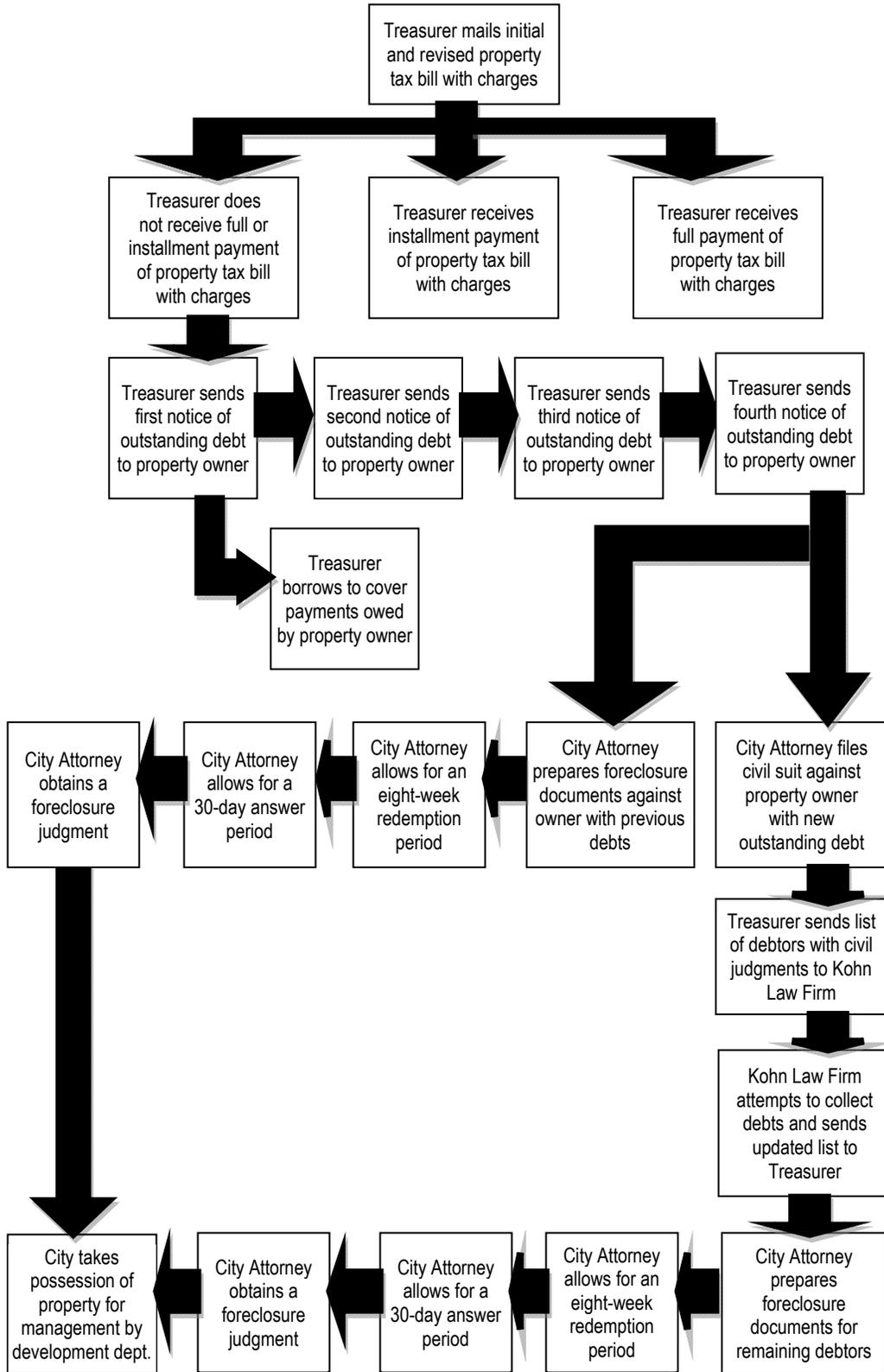
These limitations leave the City with only two major sources of revenue outside of the property tax: state aids and service charges. State aids come primarily from shared revenue, which the State allocates by formula to municipalities for general governmental use. Service charges can be applied to anything from tree removal to pool fees to sewer service, and must adequately correspond to the service provided (Jim Klajbor, Special Deputy City Treasurer's Office, personal communication, April 12, 2011). The City has little control over state aids, which are allocated primarily by formula, but the Common Council has the flexibility to increase fee rates and establish new fees.

Appendix C. Collection of Special Charges

Departments add municipal fees—except for Water Works fees totaling less than \$150—that remain unpaid at the end of the year to the property tax roll. Most departments send their unpaid fees to the Comptroller for review and submission to the Assessor’s database, but some independently review and upload their unpaid fees that become special charges into the database. The Treasurer handles the collection of special charges placed on property tax bills.

The Treasurer collects special charges over a period of two and half years. For the first year, the Treasurer imposes interest rates on unpaid special charges, borrows money to cover the unpaid amount, and sends a series non-payment notification letters to property owners. For the second year, the Treasurer continues to charge interest and turns to the City Attorney for civil suit judgments, and the Treasurer then enlists the help of Kohn Law Firm, a contracted private collections law firm, to collect on those judgments. During the third year, the City Attorney forecloses on nearly all properties with unpaid charges and property taxes exceeding \$250. Figure C1 illustrates the collection process once fees are placed onto property tax bills as special charges.

Figure C1. Special Charge Collection Process



Source: Based on interviews with city staff from the Milwaukee Treasurer's Office.

Appendix D. Municipal Fee Collection

This appendix gives a detailed overview of how the municipal fee collection process varies by fee.

Table D1. Municipal Fee Collection Practices by Fee Type

Code	Charge	Dept	Billing Type	Frequency of Correspondence	Payment Forms Accepted	Late Fee?	Conditions under which Charge Goes on Tax Roll	Average Collection Rate 2007-2010 ¹
90	Bldg Nuisance Abatement (DNS Board-Ups)	DNS	Letter	once	check or cash	No	any balance at least 30 days past due	19.9%
91	Special Privilege	DNS	Invoice	once	check or cash	No	any balance at least 30 days past due	80.4%
92	Covered Openings	DNS	Invoice	once	check or cash	No	any balance at least 30 days past due	55.0%
94	Condemned Building Razing	DNS	Invoice	once	check or cash	No	any balance at least 30 days past due	49.2%
96	DNS-Miscellaneous	DNS	Some letter, some invoice	once	check or cash	No	any balance at least 30 days past due	36.2%
9B	Fire Prevention Inspection	DNS	None	N/A	check or cash	N/A	N/A -- goes directly to tax roll	0.0%
9C	DNS-Health Abatement	DNS	Letter	once	check or cash	No	any balance at least 30 days past due	14.0%
9I	Building Re-Inspection	DNS	Letter	once	check or cash	No	any balance at least 30 days past due	11.2%
95	DPW Misc: Tree Removal and Encroachments	DPW	Invoice	once	check or cash	\$10	any balance at least 30 days past due	6.3%
97	Snow Removal (Sidewalk)	DPW	Invoice	once	check or cash	\$10	any balance at least 30 days past due	33.3%
99	Weed Removal	DPW	Invoice	once	check or cash	\$10	any balance at least 30 days past due	17.4%
8F	Garbage Cart Return	DPW	Invoice	once	check or cash	\$10	any balance at least 30 days past due	33.6%
8V	DPW- Bulky Waste	DPW	Invoice	once	check or cash	\$10	any balance at least 30 days past due	28.2%

Code	Charge	Dept	Billing Type	Frequency of Correspondence	Payment Forms Accepted	Late Fee?	Conditions under which Charge Goes on Tax Roll	Average Collection Rate 2007-2010 ¹
9M	Police Board-Ups	DPW	Invoice	once	check or cash	No	any balance at least 30 days past due	0.05%
9P	Apartment Garbage Collection	DPW	Invoice	quarterly	check or cash	No	any balance at least 30 days past due	93.0%
93	Water	MWW	Invoice	quarterly; large customers monthly	check, cash, MasterCard, Discover, E-Check/AutoPay ²	5%	MWW Tax Roll Policy ³	90.9%
8S	Municipal Services (Solid Waste and Snow & Ice)	MWW	Invoice	quarterly; large customers monthly	check, cash, MasterCard, Discover, E-Check/AutoPay ²	3%	MWW Tax Roll Policy ³	82.8%
8T	Storm Water	MWW	Invoice	quarterly; large customers monthly	check, cash, MasterCard, Discover, E-Check/AutoPay ²	3%	MWW Tax Roll Policy ³	88.8%
9D	Sewer	MWW	Invoice	quarterly; large customers monthly	check, cash, MasterCard, Discover, E-Check/AutoPay ²	3%	MWW Tax Roll Policy ³	90.0%

¹ Data source: Milwaukee Water Works and the Departments of Public Works and Neighborhood Services.

² E-Check is a one-time electronic check payment, AutoPay is a regular automatic payment option offered through www.directpaymentplan.com

³ MWW tax roll policy: Water Works accounts are eligible for transfer to tax roll if they are in arrears for six months or more and have unpaid balances of \$150 or more in one of the its four categories of services. Only the service with the balance more than \$150 will be transferred. All transfers incur a 10 percent administrative charge. Note: Charge 8Y "Non-City Water" is not included because from 2007 to 2010 there was only one such charge, \$447 (in 2009). Similarly, 8J, Health Department's Lead Abatement charge, is omitted because it is the only special charge outside of DPW, DNS, and MWW.

Appendix E. Sample Notifications

Shown below are a sample invoice and letter from the Department of Neighborhood Services. The invoice (Figure E1) has a short description of the fee and a due date, while the letter (Figure E2) has an explanation of the fee schedule and no due date.

Figure E1. Department of Neighborhood Services Sample Invoice

 City of Milwaukee	INVOICE Department of Neighborhood Services 841 N. Broadway, Room 105 Milwaukee, WI 53202 Invoice #: 103743
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Invoice date: **01/04/2010**

PERIODIC ELEVATOR INSPECTION

Please call 414-286-3645 for any questions regarding this invoice

Property Address: [REDACTED]
Elevator# 18260 Type: Passenger Inspection Date: 12/14/2009
Inspection Fee: \$140.00 Payment Due: 02/03/2010

The amount of this charge is set by ordinance and is not subject to appeal.
If you want to contest the charge you may file a claim, pursuant to S. 893.80 Wisconsin Statutes, with the Office of the City Clerk, 200 E Wells Street, Room 205, Milwaukee, WI 53202, (414) 286-2221.

Please make check payable to **City of Milwaukee** and return in enclosed envelope.

PLEASE RETAIN THIS PORTION FOR YOUR RECORDS

PLEASE RETURN THIS PORTION WITH YOUR PAYMENT

PERIODIC ELEVATOR INSPECTION

[REDACTED]
--



Invoice No: 103743

Inspection Fee: **\$140.00**
Payment Due: **Feb 03, 2010**

Department of Neighborhood Services
841 N. Broadway Room 105
Milwaukee, WI 53202

Figure E2. Department of Neighborhood Services Sample Letter

CITY OF MILWAUKEE
DEPARTMENT OF NEIGHBORHOOD SERVICES
Residential Section
4001 S. 6th St.
Milwaukee, WI 53221
July 27 , 2010



Order #: 7729101

RE: 

When a property is reinspected and violations remain uncorrected, the Milwaukee Code of Ordinances provides for these reinspection fees:

First reinspection \$50
Second reinspection \$75

Third reinspection \$200
All subsequent inspections \$350

There is no charge for the reinspection that shows compliance with all violations.

All reinspections which show noncompliance with the order will be charged at the above rate. These fees will be assessed against the property as a special charge and will appear on the tax bill for this property. **On 07/13/10, we imposed a \$50 reinspection fee.**

As you can see, the cost of noncompliance with the code can add up quickly. The Department would prefer to see you put the money into correcting the violations and not into paying reinspection fees. Please contact me as soon as the violations have been corrected. If I do not hear from you, I will continue to reinspect until the property has been brought into compliance with the code. Please do not put us in that situation.

If you wish to appeal this \$50 charge you must file that appeal within 30 days of the date of this letter. It must be filed with the: Administrative Review and Appeals Board, Office of the City Clerk, Room 205 City Hall, 200 E Wells Street, Milwaukee Wisconsin 53202, 414-286-2221. Please contact them to obtain the proper application form. There is a \$25 fee required when filing this appeal.

Please be advised that if you have filed for bankruptcy, this letter is for informational purposes and is not intended to be construed as an attempt to collect a debt during the pendency of your bankruptcy as other conditions may apply.

Please call me at [414] 286-3433 during the hours of 7-9am 2-3pm Monday through Friday for information on which violations remain uncorrected or if you have any questions.

Michael Mazmanian
Inspector



Appendix F. Special Charge Nonpayment Trends

We can think about the Treasurer’s data as a compilation of single years to provide snapshots in time as property owners with unpaid special charges make their way through the City’s collection process. We have a snapshot of newly issued special charges (2010), a snapshot of special charges unpaid after one year on the property tax roll (2009), after two years (2008), and after three years (2007). We can look at special charges and provide summary statistics about uncollected charges, the total and average value of those charges, and certain characteristics of properties with outstanding special charges, namely: assessment class, owner occupancy status, median property value, and aldermanic district.

Characteristics of Charges

According to data from Milwaukee Treasurer’s Office, 30 percent of properties in Milwaukee had special charges on their tax bills in 2010 (see Table F1). These unpaid charges are worth almost \$50 million. There are roughly 12,000 properties (7.3 percent of all properties) with special charges outstanding after one year on the property tax roll, 3,400 properties (2.1 percent) with charges unpaid after two years, and 995 properties (0.6 percent) with special charges after three years on the property tax roll. All together, there is more than \$70 million of uncollected charge revenue in Milwaukee.

Table F1. Unpaid Special Charges by Years on Tax Roll

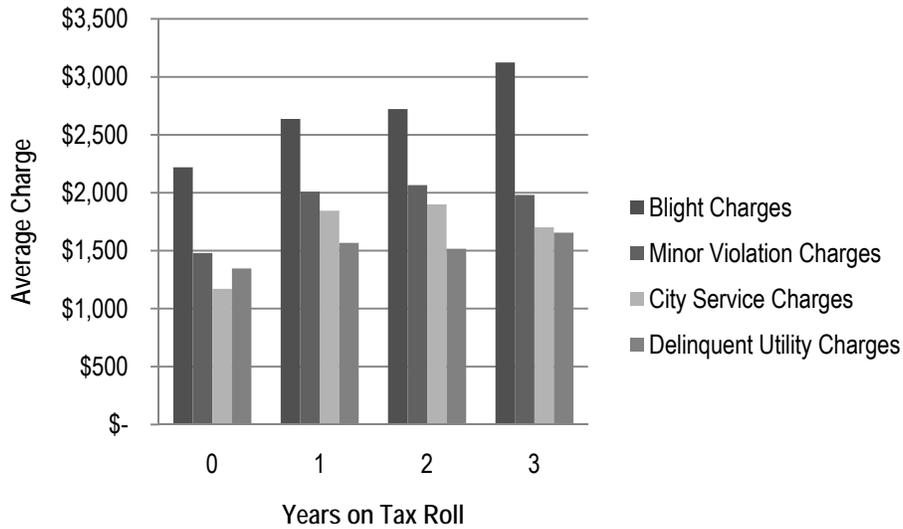
Years on Tax Roll	Number of properties with special charges	As a share of all Milwaukee properties	Average uncollected special charge	Total outstanding special charges
0	48,868	30.1%	\$1,005	\$49,103,972
1	11,838	7.3%	\$1,310	\$15,502,639
2	3,443	2.1%	\$1,336	\$4,600,294
3	995	0.6%	\$1,432	\$1,424,704
Total				\$70,631,608

Source: Calculated using City of Milwaukee Treasurer’s Office data.

The significant reduction in the number of properties with special charges, and the total value of outstanding charges between initial placement on property tax bills (year 0) and subsequent years, demonstrates that most charges are eventually collected. However, the City is forced to forgo revenues for multiple budget years until the charges are collected.

Figure F1 breaks down the average uncollected special charge by year and charge category. As you can see, average blight-related charges are considerably more expensive than other charge categories, and within each year, the variation of non-blight charges is roughly only \$500. The average value of a special charge does not change dramatically between one-year delinquent (2009) and three years delinquent (2007). One might expect smaller charges to be paid off more quickly, driving up the average longer-term charge, but that does not appear to be the case after initial placement on the tax bill. However this might explain the increasing value of outstanding blight charges over time.

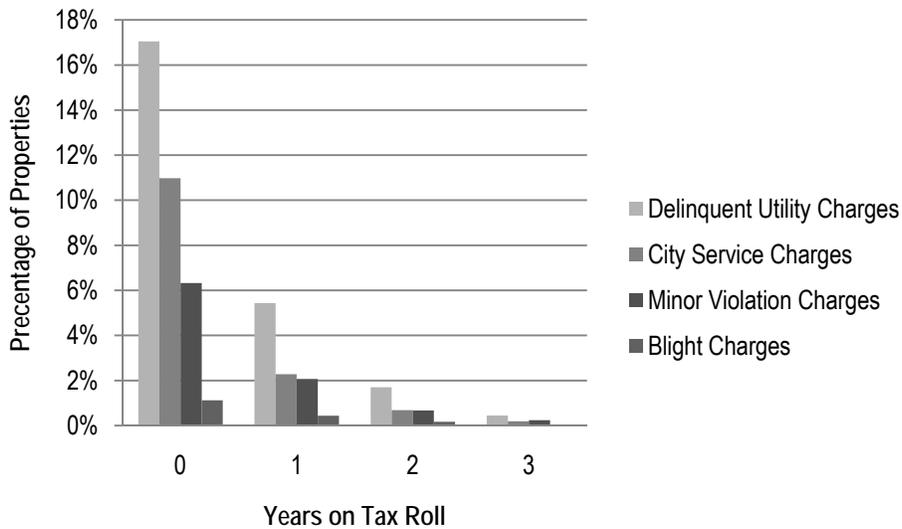
Figure F1. Average Unpaid Special Charge



Source: Calculated using data from City of Milwaukee Treasurer's Office.

Figure F2 shows the number of properties with unpaid special charges as a percentage of all Milwaukee properties. This figure demonstrates that properties with delinquent utility charges make up the largest percentage of unpaid charges, followed by city service charges, minor violation charges, and blight charges. Although average blight charges are the most expensive of the charges (Figure F1), they represent the smallest percentage of unpaid charges each year. Average delinquent utility charges are often the least expensive average charge, and yet they represent the greatest percentage of properties with special charges.

Figure F2. Percentage of Milwaukee Properties with Special Charges



Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

Characteristics of Properties

In Milwaukee, 83 percent of all properties are classified as residential or commercial properties. All remaining property classes, manufacturing, special mercantile, condominiums, mercantile apartments or tax exempt, make up 17 percent of total properties in Milwaukee (see Table F2). These percentages are similar for properties with special charges that are zero, one, two, and three years outstanding (issued from 2010 to 2007, respectively). In general, properties with special charges have a higher percentage of commercially assessed properties relative to all Milwaukee properties. With the exception of fees for city services, the same is true for residential properties with special charges. Interestingly, there is a smaller percentage of non-residential or commercial assessment classes relative to the rest of the City. One might expect to see a high number of tax-exempt properties with special charges, but that does not appear to be true.

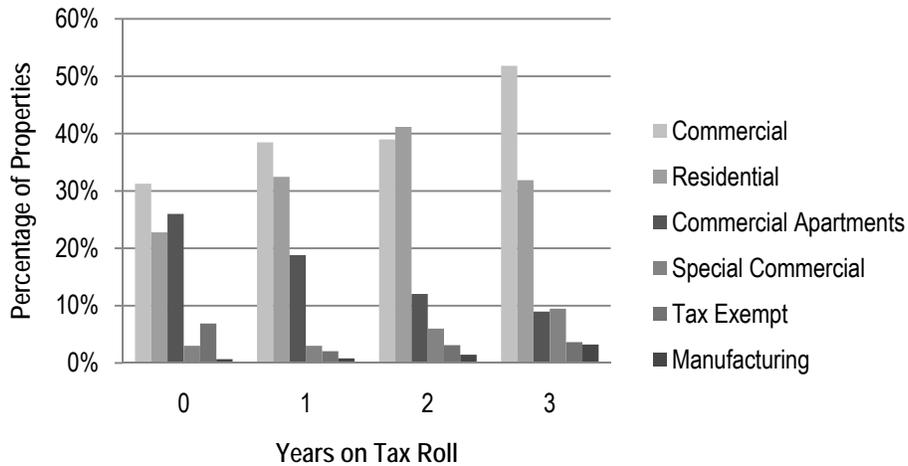
Table F2. Residential and Commercial Properties with Special Charges

Years on Tax Roll	Assessment Class	All Milwaukee Properties	Properties with Special Charges			
			Minor violations	City services	Delinquent utility	Blight
0	Residential	79%	83%	23%	90%	86%
	Commercial	4%	8%	31%	5%	6%
	Other	17%	9%	46%	6%	8%
1	Residential	79%	81%	32%	84%	87%
	Commercial	4%	10%	38%	8%	6%
	Other	16%	9%	29%	8%	7%
2	Residential	80%	80%	41%	82%	88%
	Commercial	4%	14%	39%	10%	8%
	Other	16%	6%	20%	8%	4%
3	Residential	83%	72%	32%	80%	85%
	Commercial	4%	24%	52%	13%	11%
	Other	12%	4%	16%	7%	4%

Source: Calculated using data from Treasurer's Office merged with MPROP data.

That so many commercial property owners owe fees is not surprising because fees for city services relate to commercial inspections and requested services. What is surprising is that such a high proportion of non-residential and commercial properties owe special charges for fees for city services. A closer examination shows that mercantile apartments made up about a quarter of properties with new city services special charges, but this portion drops to less than 10 percent of properties with city services special charges that are three-years delinquent. Special mercantile properties, on the other hand, comprise a greater portion of properties with city services special charges that are three-years delinquent than of properties with newly issued city services special charges (see Figure F3).

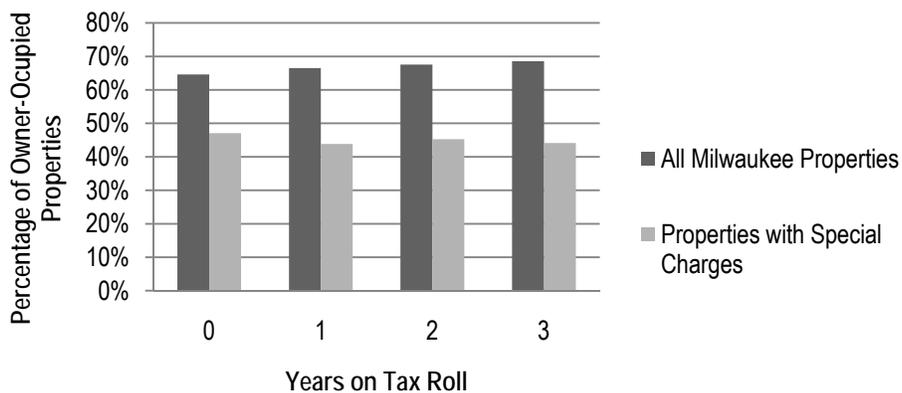
Figure F3. Percentage of Properties with Special Charges for Fees for City Services



Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

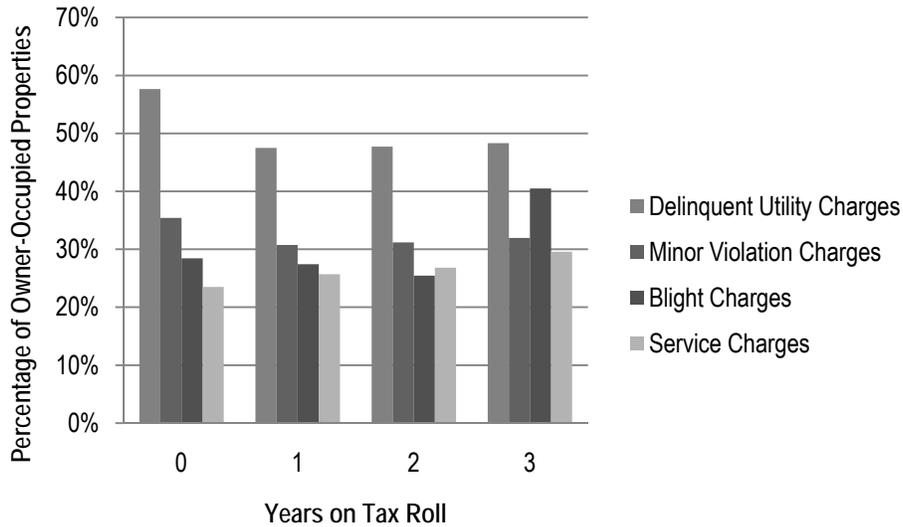
More than 65 percent of properties in the City of Milwaukee are owner-occupied (see Figure F4). In contrast, only 45 percent of properties with special charges are owner-occupied. When broken down by charge category, properties with delinquent utility charges have the highest rates of owner occupancy, followed by minor violations and blight charges (see Figure F5). It is reasonable that property owners who owe fees for city services, typical of commercial properties, would have low rates of owner occupancy, while minor violation charges, which relate to homeowner responsibilities, correlate to higher rates of owner occupancy. The percentage of owner-occupied properties with special charges and the percentage of owner-occupied properties in Milwaukee are constant even as charges become one-, two-, and three-years delinquent.

Figure F4. Percentage of Owner-Occupied Properties



Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

Figure F5. Percentage of Owner-Occupied Properties with Special Charges



Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

The median property value in the City of Milwaukee (all assessment classes) is around \$115,000 and has fallen slightly since 2007 (see Table F3). The median property value for properties with special charges is in general much lower than the rest of Milwaukee. The one large exception is properties whose owners owe special charges for fees for city services. These properties have much higher values than city average, likely because the fees pertain to commercial property. As charges become more delinquent, the value of properties with special charges falls even farther from the city median value.

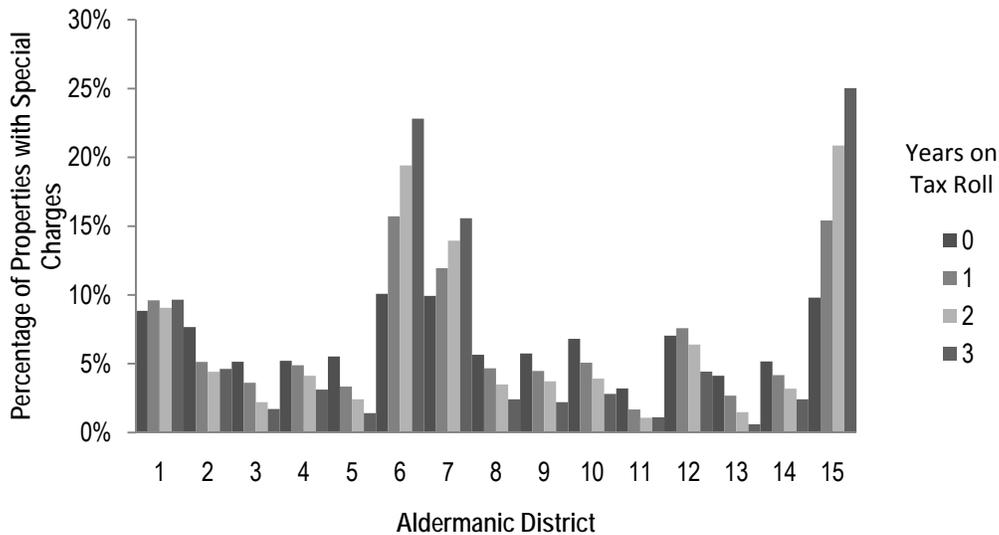
Table F3. Median Property Values

	2010	2009	2008	2007
All Milwaukee Properties	\$110,900	\$116,100	\$127,700	\$126,300
	Years on Tax Roll			
	0	1	2	3
Minor Violation Special Charges	\$79,900	\$70,300	\$74,000	\$58,800
City Service Special Charges	\$177,500	\$126,000	\$99,300	\$79,300
Delinquent Utility Special Charges	\$87,700	\$80,700	\$83,600	\$70,450
Blight Special Charges	\$63,700	\$60,500	\$69,700	\$56,600

Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

Another interesting descriptor of properties with special charges is their geographic location, as analyzed through aldermanic district. Milwaukee has 15 aldermanic districts, and the majority of properties with special charges are located in three districts: District 6, 7, and 15 (see Figure F6). This trend is especially true as properties become more and more delinquent. Of the one-year delinquent charges (2009), 43 percent of properties with special charge were located in district 6, 7, and 15. For properties with three-year delinquent charges, 63 percent are located in districts 6, 7, and 15.

Figure F6. Properties with Special Charges by Aldermanic District



Source: Calculated using data from the City of Milwaukee Treasurer's Office merged with MPROP data.

In summary, special charges represent just more than \$70 million in uncollected city revenue. The majority of special charges will be collected or dropped after three years on the property tax roll. The average outstanding charge ranges in value between \$1,500 and \$2,000 and depends on the type of charge. Properties with special charges are less likely to be owner-occupied, more likely to have lower assessed property values, and more likely to be residential and commercial properties than the rest of Milwaukee properties. Moreover, properties with special charges are likely to be located in three districts in central Milwaukee.