



Public Works

Departmental & Utilities

August 23, 2011

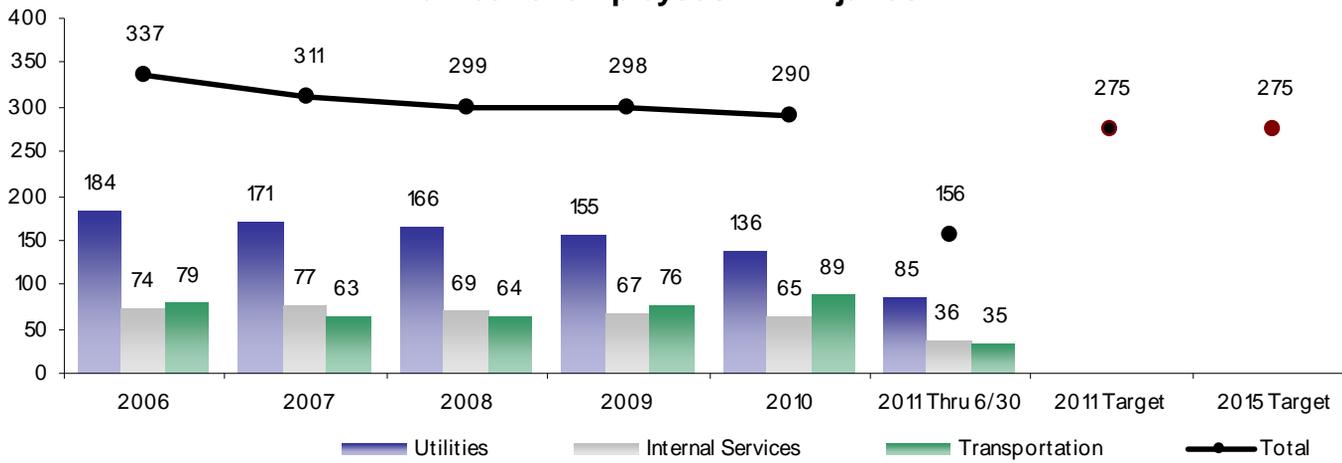
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Note: The 2nd & 4th *Results Minneapolis* sessions for Public Works for the year will focus on Transportation & Internal Services measures; The 1st and 3rd *Results Minneapolis* sessions for Public Works for the year will focus on PW Departmental & Utilities measures.

Number of employees with injuries



Employee injury data compiled from information provided by Risk Management

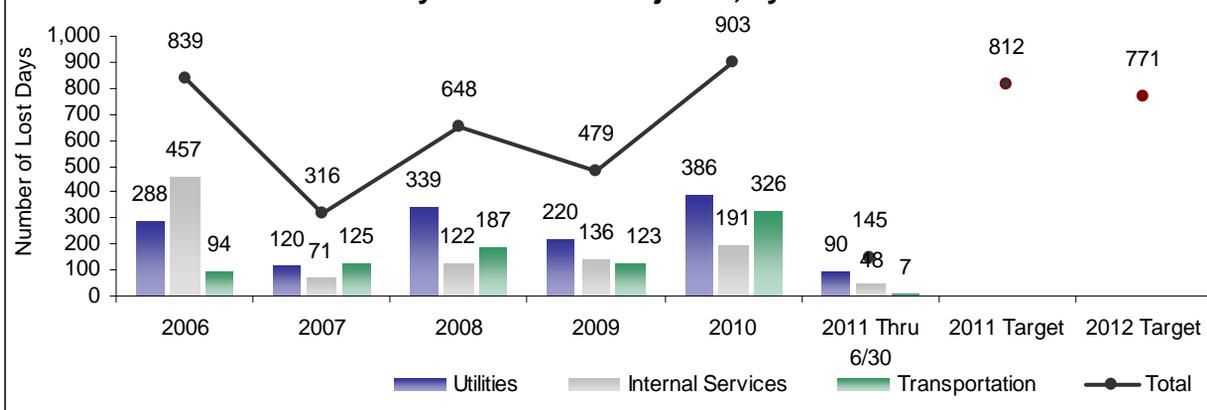
Why is this measure important?

Recording and monitoring lost days are an important measure because it is an indicator of the health and safety of the workplace. Lost days data can give an indication of trends, employee morale, training needs and problem operations or projects. Public Works Safety monitors lost time closely looking for trends or higher than usual amounts (bottom chart). In 2010 we saw a significant increase of lost days due to work related injuries primarily within our transportation business lines where two TMR employees with severe injuries (related to lifting/ lower back strains and carpal tunnel) and generated **169 days**. In addition the Water division has 4 employees with various injuries generating **260 days** of lost time (they include injuries related to strains and fractures). These six employees account for approximately **47%** of the total lost days for the year. We have changed the data source from using the OSHA log to using the Risk Management reports. The difference is that risk management reports include all employee injuries that are reported on the Supervisor's First Report of Injury while the OSHA logs only reported on "recordable" injuries for up to 180 days.

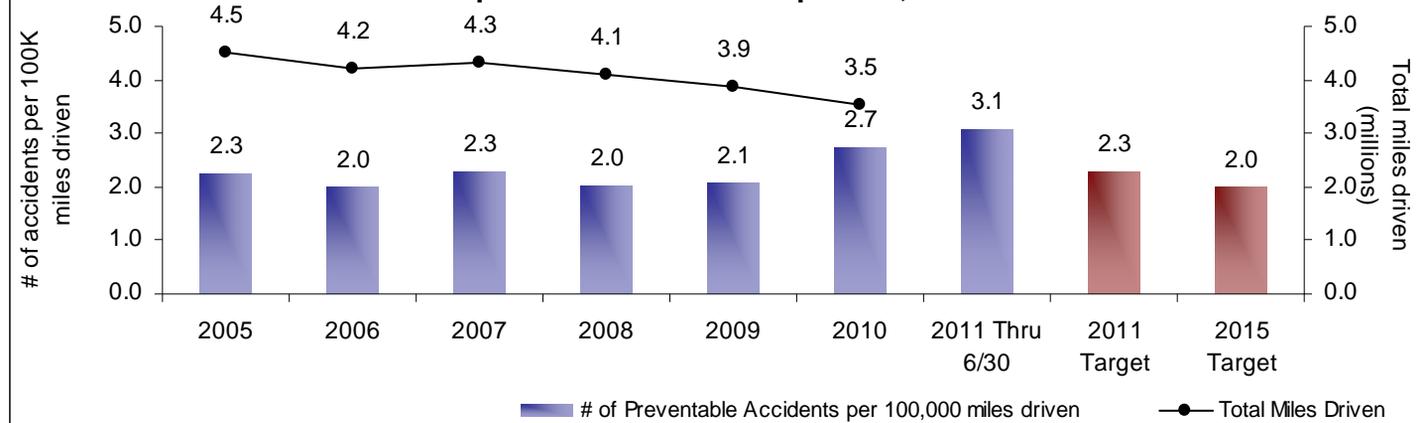
What will it take to achieve this target?

Because we have changed our data source to capture all injuries and provide a more accurate picture of the total injuries within the Public Works Department we will also need to adjust our targets specifically within the number of employees with injuries. We are tracking an average of 305 employee injuries for the period of 2006 – 2010 and are on track for 2011 to remain flat. As the workforce ages our work with the wellness team becomes more important and we look for ways to help employees maintain a healthy lifestyle while at work. We are encouraging employees to use stretching techniques before they begin work and again after work is over, to complete the "health assessment" and "health coaching" through Medica and to take more time in working safely as to not cause sprains and strains. In addition the Safety team will include discussions about wellness at all "Safety Days" and to conduct a safety review with individual employees with repeat injuries, the direct supervisor, the Mgr of Safety and other persons as appropriate to create a safe at work plan.

Total lost days due to work injuries, by business line



Number of preventable accidents per 100,000 miles driven



Why is this measure important?

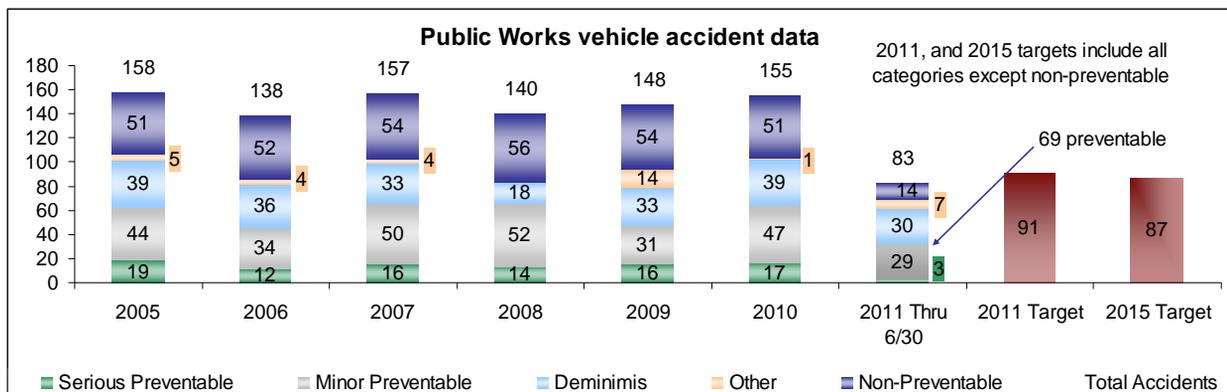
The data used to calculate the per 100,000 miles driven comes from the Fleet Services division fuel pump reports thru M5. We are still in the process of validating the data. With that said the PW Department makes safety a priority. This is important because PW has a large number of vehicles on the road with a potential for great liabilities (costs) when accidents occur. These liabilities include such things as equipment repair, employee injury (worker's compensation), employee replacement and costs associated with the damage claims or lawsuits of others. By reducing the number of employees involved in preventable accidents the department could realize a reduction in these associated costs and liabilities. Preventable accidents are categories of vehicle accidents that can be influenced through comprehensive and recurring training and other means. As the total miles driven continue to go down and the department reduces the number of vehicles in the fleet and who as access to city-owned vehicles. This is a new measure that we will need to continue to watch and modify as appropriate given the reliability of the data source.

This year data for number of preventable accidents was influenced by the severe weather between the months of November 2010 and March 2011. There were a total of 75 minor preventable accidents during this time period which affects this ratio.

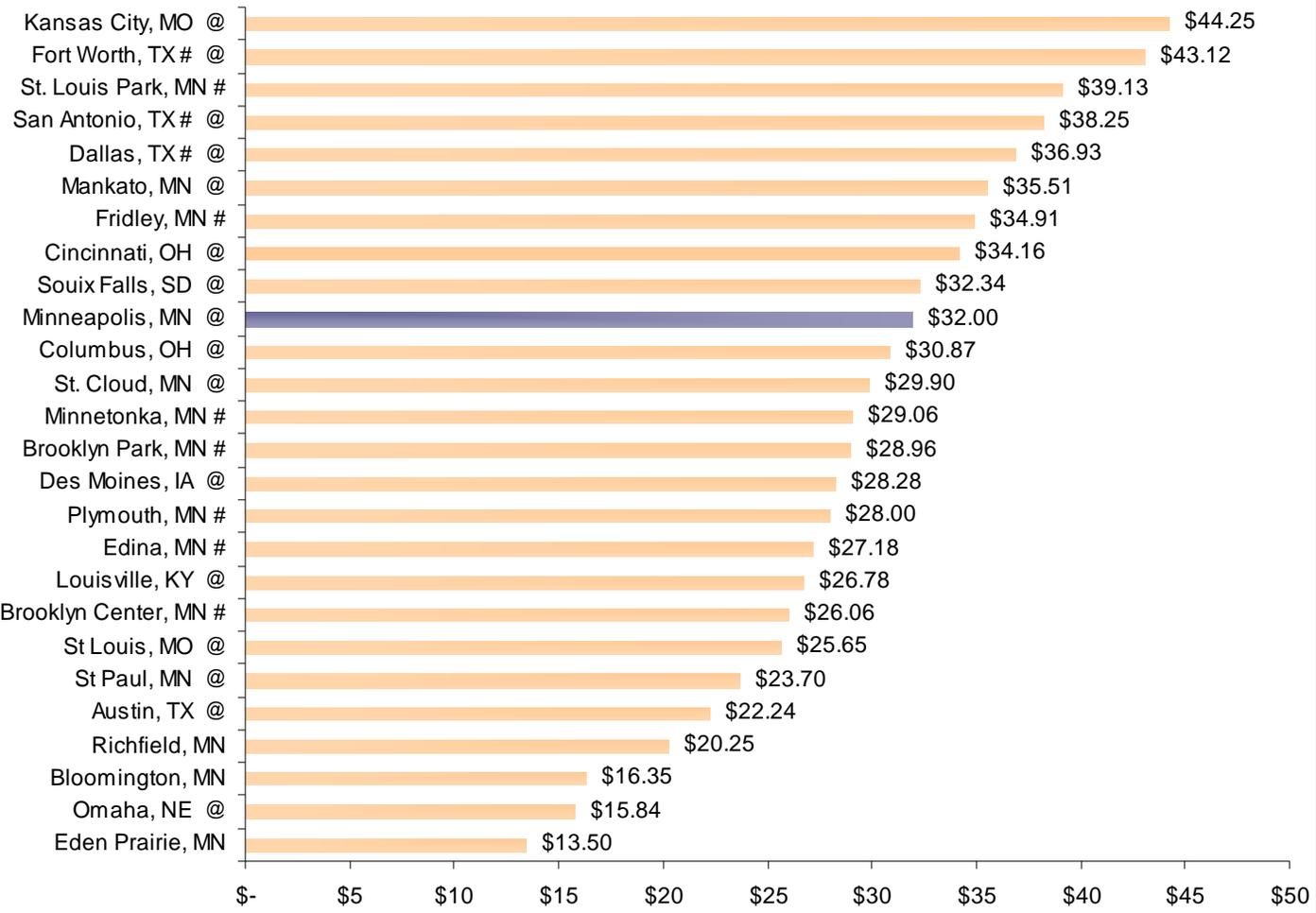
What will it take to achieve this target?

Because of the severe weather we are tracking higher in "preventable" accidents for the first half of 2011 (69) when compared to the same period in 2010 (44), therefore meeting our target may be a challenge to realize a reduction in this area. Our strategy to meet our current targets will include the following:

- Work with the Fleet Division to provide winter driving preparedness training through an established program using both internal and external resources.
- Continue using the Incident Review Board (IRB) process which includes individual employee assessments and appropriate training recommendations for those with multiple preventable accidents.
- Continue the Safe Driver Award program which rewards employee for accident free driving. In 2012 review the program for updates where available.
- Hold employees accountable when they are involved in preventable accidents through the IRB process and performance deficiency reviews.
- Continue to review best practices in the industry to enhance the current safe driving program.



2011 comparison of residential monthly water charges (normalized for softening)



Average = \$29.35; Median = \$29.02;

- Based upon a monthly consumption of 10 units of 100 cubic feet or about 7,500 gallons.
- Cities that obtain all or some of their raw water from the surface or from RIVERS, are indicated with a “@”.
- Cities were chosen to be on this list both because they were drawing water from rivers in mid-western USA and/or they were nearby a larger city.

Normalized for those cities that do not soften the finished water - Our normalization for softening equates to \$2.06 per 1000 gallons. Of that \$2.06, \$1.14 is for depreciation of the home water softener, \$0.52 is for salt, and \$0.40 is the cost of additional water/sewer used for brining/rinsing/backwashing.

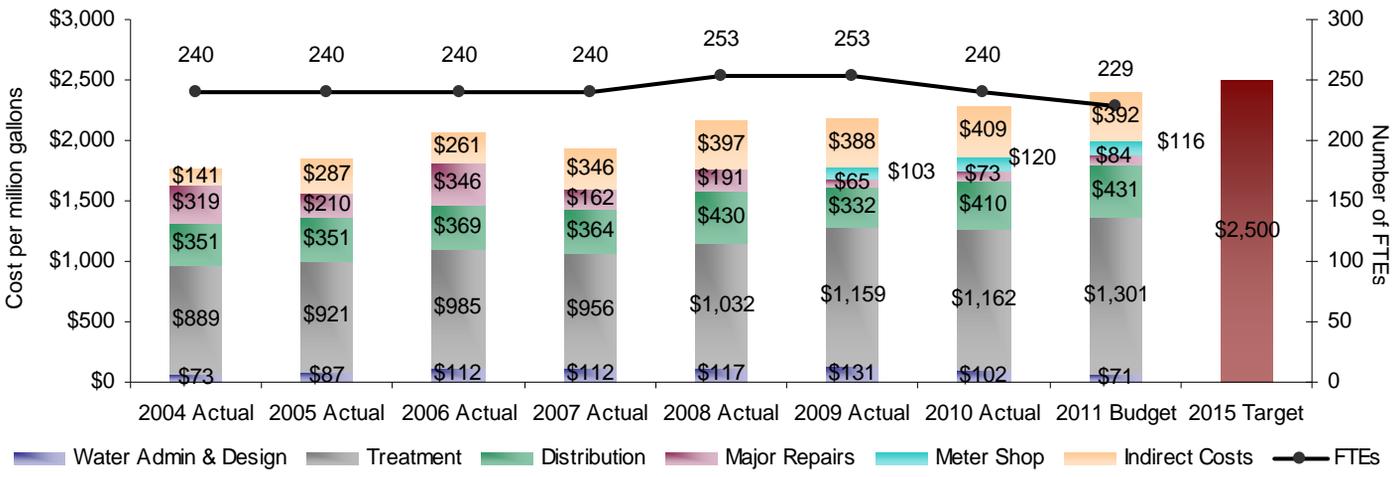
Why is this measure important?

This measure is important in order to show how the cost of providing water in Minneapolis compares to other cities for sales of the same amount of water. Some of the cities with the lower charges are younger, smaller cities with little or no debt and minimal maintenance costs. Over time the charges in these cities will show increases. The cities on the top of the chart tend to be older cities that have had to re-invest in their water operations as the infrastructure ages.

What is the target for this measure?

Our target/goal is to be below the average rate for this grouping of cities by 2015, which will make us a more competitive water supplier and will be more satisfactory to our customers in Minneapolis and the suburbs. In the last two decades, Minneapolis has invested heavily to improve our treatment operations and to maintain our system.

Water division total operating costs per million gallons of water produced and total authorized FTEs



- The increase of 13 FTEs in 2008, is the result of moving the Design cost center back under Water.
- The meter shop was moved from Distribution to its own cost center in 2009.
- Sludge hauling was moved from Major Repairs in 2008 to Treatment in 2009.

Why is this measure important?

Since water utility revenue (and associated billing rates) needs to recover operating costs, it is very important that we track these costs and to become as efficient as possible in all areas and be competitive with other cities. The graph above does not include debt service to the utility. In future results sessions, debt service and capital pay-as-you-go will be included so all of the costs that influence the rate will be evident.

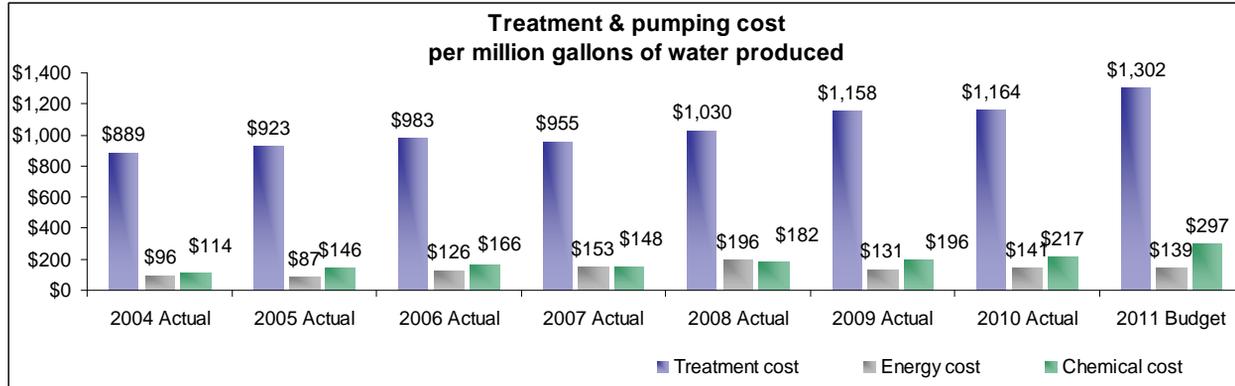
Treatment and pumping costs are an indicator of the unit cost of water production. Some costs, such as chemical and energy are dependent upon the volume of water produced. Other costs, such as employees' salary and fringe benefits are not. The following graph shows the amount and percentage of Treatment & Pumping costs attributable to these three areas. The graph indicates that since 2004 the actual unit cost for chemicals has almost doubled (going from \$114/MG in 2004 to \$217/MG in 2010).

What is the target?

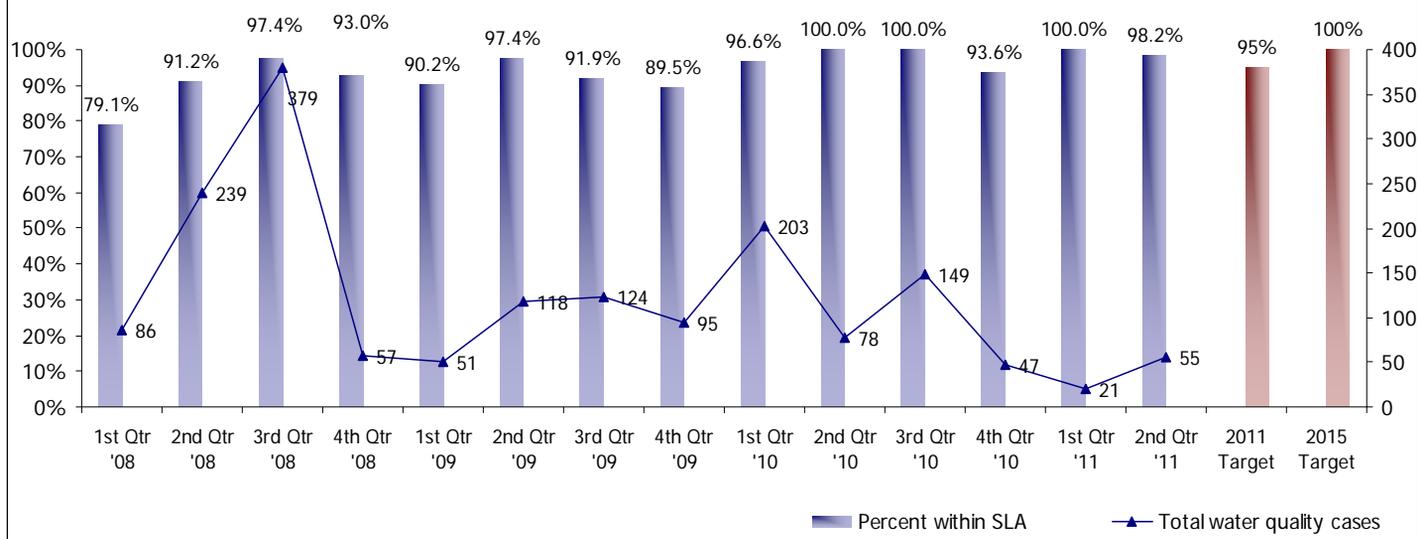
The target is to achieve a division total operating cost of less than \$2,500 per million gallons by 2015. This results in an average growth of about 2% per year.

What will it take to achieve the target?

In order to achieve this target we will have to provide improved staff utilization and enhanced performance. We will also have to optimize the use of chemicals and tighten the specifications on the quality of chemicals as well as use better energy management practices. It is important to be able to project and track costs accurately so that the division will stay within its budget. We will also need to find ways to minimize the overhead costs to the water operation, as well as to be as efficient as possible in all aspects of the production of potable water and in our maintenance practices so that the City can both retain municipal customers and to limit the costs to our citizens and businesses.



Percent of water quality service requests resolved within service level agreement (3 days)



SLA History Recalculate: In February, when we last reported this measure, the SLAs were being treated as if it were 2 working days. We have recalculated all of the quarters and adjusted the percentages resolved within an SLA of 3 working days.

Why is this measure important?

This measure tracks responsiveness to customer feedback which is important because it relates to customer satisfaction with the City's drinking water. As part of ongoing efforts towards an eco-focused City, residents are encouraged to drink tap water rather than water from single use plastic bottles. Water quality complaints and how many of these complaints have been addressed by the PW Water division within an SLA of 3 working days is a measure of responsiveness to customers. This measure relates to water aesthetics and public confidence in drinking tap water.

Water Quality Issue:

The Reporting Party calls the City to report an issue with their water (odor, color, pressure, etc.). Reporting may also be via a self-service format 24 hours/day on the City of Minneapolis public website. City drinking water is very closely monitored and sampled daily to make sure that it meets USEPA Safe Drinking Water Act standards. However, the quality of the water at our customers' taps is the ultimate driver of customer satisfaction.

Procedure:

Taste and odor complaints are reviewed by the Water Quality laboratory and may be used to identify that treatment changes may be needed to offset organic loading in the source water. Discolored water issues typically are due to mineral deposits from the inside walls of unlined cast iron water main pipe. Crews can be dispatched to flush hydrants until the water is clear.

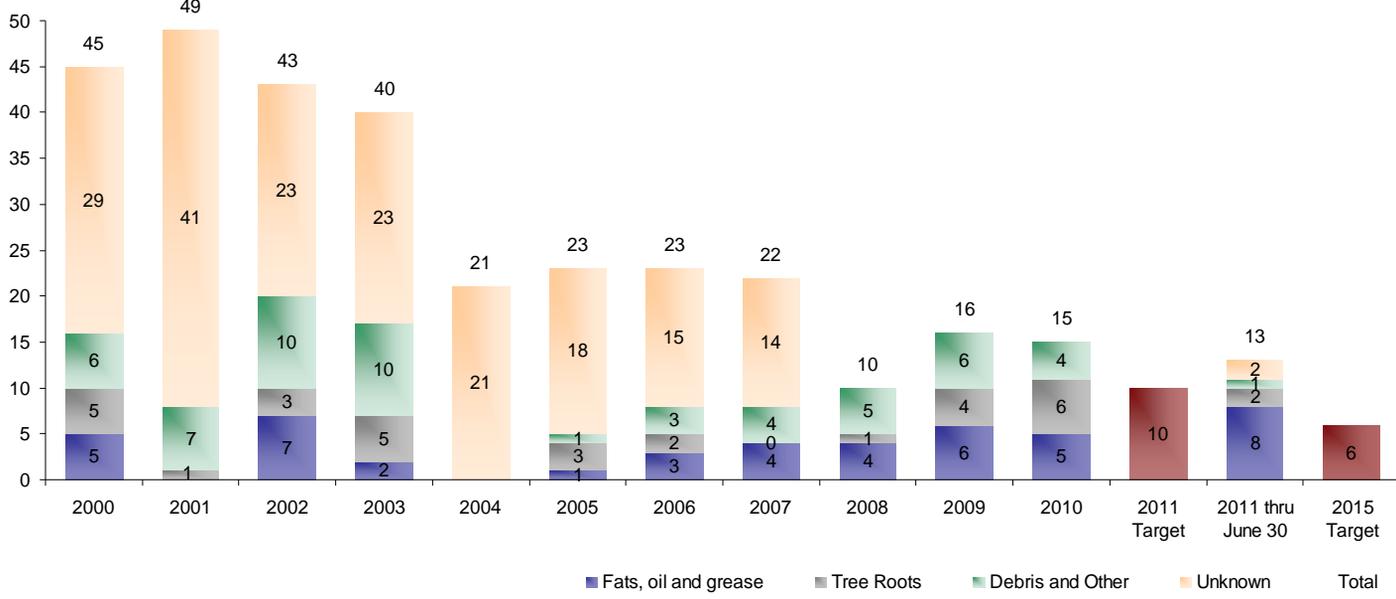
Service Level Goal:

3 working days for resolution of a water quality service request. In addition, we maintain the goal to reduce the number of complaints from year to year. In 2010 there were a total of 477 service requests, down from 761 in 2008 and up slightly from 388 in 2009.

Resolution:

In addition to daily, continuous monitoring and adjustment of treatment processes, we have a strategic initiative to improve taste and odor of the water, regardless of challenges presented by the source river. This initiative focuses both on improving the performance of control strategies already in place and in identifying new technologies which may be appropriate for future implementation. The discolored water complaint database is used in planning the water main cleaning and lining program to reduce complaints of discolored water. A water distribution hydraulic model is under development which will enable assessment and management of water age in the system.

**Number of sewer back-ups, by cause
(Public sanitary sewer system only)**

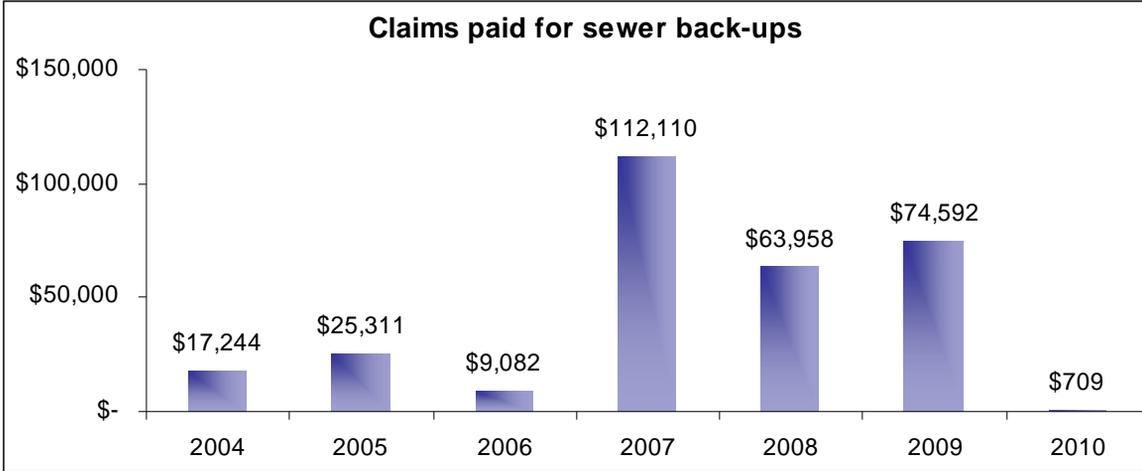


Why is this measure important?

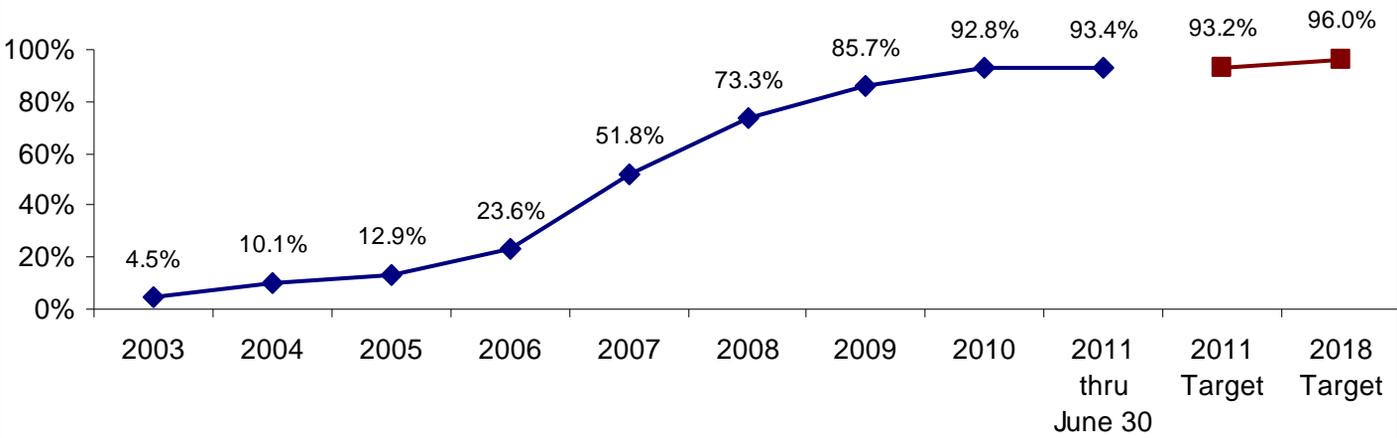
The prevention of sanitary sewer backups in the public sanitary sewer system is a primary health and human services issue in providing a clean and livable City. Public sewer lines that cause backups onto private property have a financial liability potential to the City for reimbursing residents for resulting damages. This measure can be used as an indicator of how well the City is managing its sewer system operation, maintenance and support activities. Important components include managing and regulating what is being discharged into the system and regular cleaning of the sanitary sewers, rather than cleaning them only if completely plugged. The City regularly cleans all sanitary pipes 15” or smaller in diameter on a regular schedule that varies from every six months to every two years, depending on history, size and type. Problem areas identified in the system that are related to fats, oil and grease (FOG), tree roots and original construction compromises in pipes are inspected and appropriately maintained on a regular interval.

What will it take to achieve the target closer to six backups per year?

Ideally there would be zero sanitary sewer backups that result from public sewer line deficiencies but that number is not a reasonable goal within the budget, therefore six back ups per year has been selected as an achievable goal. To achieve success, fats, oil and grease (FOG) and foreign material need to be kept from entering the sanitary system, eliminate stormwater, eliminate flow problems in the system, increase efforts for sewer cleaning, condition assessments and increase tree root removal efforts. To achieve this level of service, the City would need to initiate a FOG program to increase regulatory compliance on discharges, continue the capital program (sanitary pipe lining) and maintain or increase the operational budget.



Rainleader disconnect program, annual compliance rate



Why is this measure important?

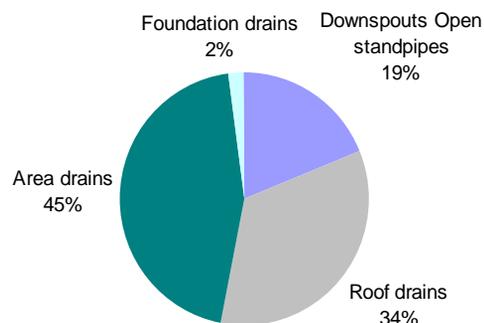
The Rainleader Disconnect Program (RLD) was initiated in 2003 to facilitate separation of the storm and sanitary system, with the goal of eliminating sanitary overflows to the Mississippi River. The City and the Metropolitan Council funded a 2002 study that identified inflow from private sources such as roof drains, downspouts, and foundation drains as the main culprit contributing to Combined Sewer Overflows (CSOs) and excess clear water entering the sanitary sewer system. Over a five year period, the RLD systematically inspected every parcel in Minneapolis to locate these improper connections. The inspection program yielded over 6,000 separate locations of stormwater connections to the sanitary sewer. The program results currently stand at about 464 locations remaining to be corrected, equaling a compliance rate of 92.8%.

After having no Combined Sewer Overflows to the Mississippi River in the past three years, we experienced two over flows in 2010 (June and August). This is a reminder that it is important to continue appropriate separation of storm and sanitary sewers to minimize the risk of future CSOs during severe wet weather events. Additional benefits are realized in reduction of costs for treating clear water inflow to the sanitary sewage treatment system.

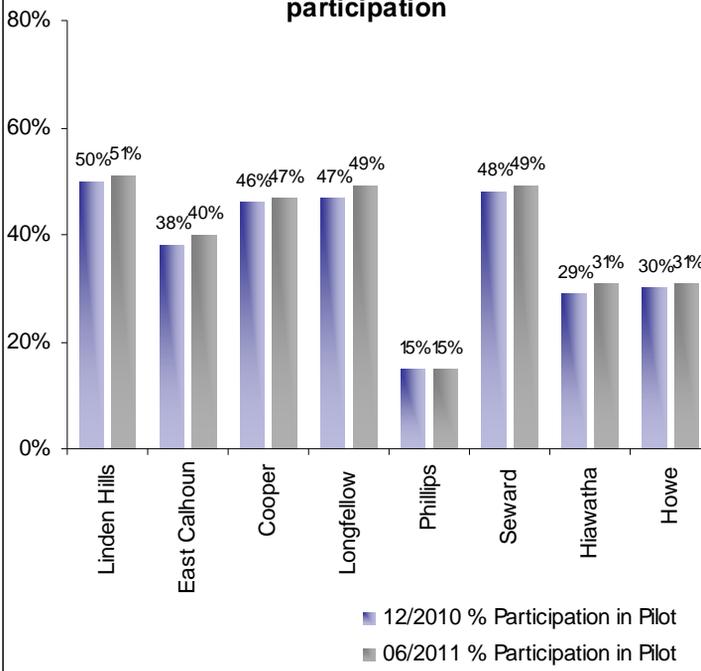
What will it take to achieve the goal of 96% compliance with the RLD Program?

The RLD has provided materials for homeowners to disconnect downspouts, and has done the work for them at their request. Many remaining properties are in foreclosure or ownership transition and will require careful monitoring for disconnection opportunities. Other parcels need new public infrastructure to disconnect and therefore we are working towards completion in 2017/2018 timeframe. Administrative enforcement such as citations, fines, and disconnection agreements have been successful and will continue to be utilized.

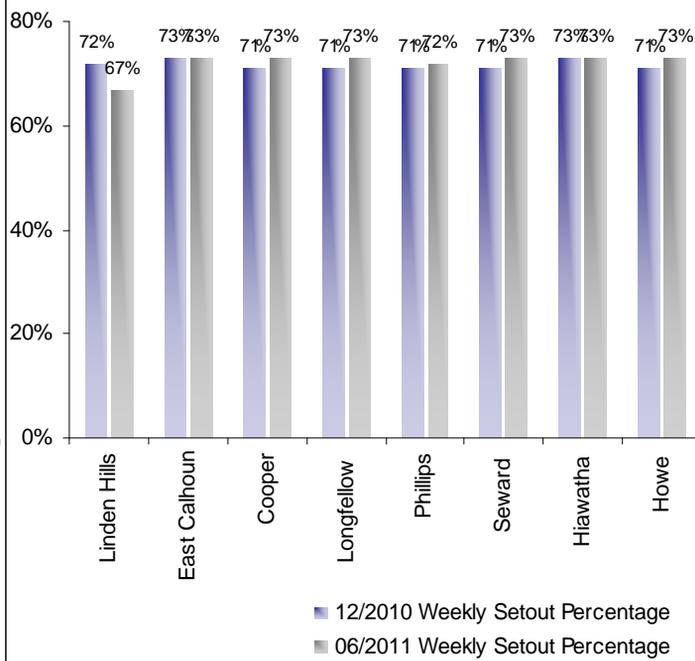
Open violations by type (as of June 30, 2011)



Organics pilots - neighborhood participation



Organics pilots - neighborhood setout rates



The charts above show data to-date thru Dec. 2010 and to-date thru June 2011 for Participation Rate and for Set-out Rates. The organics pilot started in Sept. 2008 in East Calhoun; Sept. 2009 in Linden Hills; and Sept. 2010 for the rest.

- Participation Rate is the percentage of eligible residents that said that they would participate.
- Weekly Set-out Rate is the percent of the eligible residents that actually set-out organics weekly.

Below – the Est. Rental % is the estimated percent of the households in a neighborhood that are rental. This data shows a slight increase in the percent participation for all neighborhoods except Phillips, which stayed the same. Also, it shows a slight increase in Set-out percentage for all of the neighborhoods except for Linden Hills, which went down by 5%.

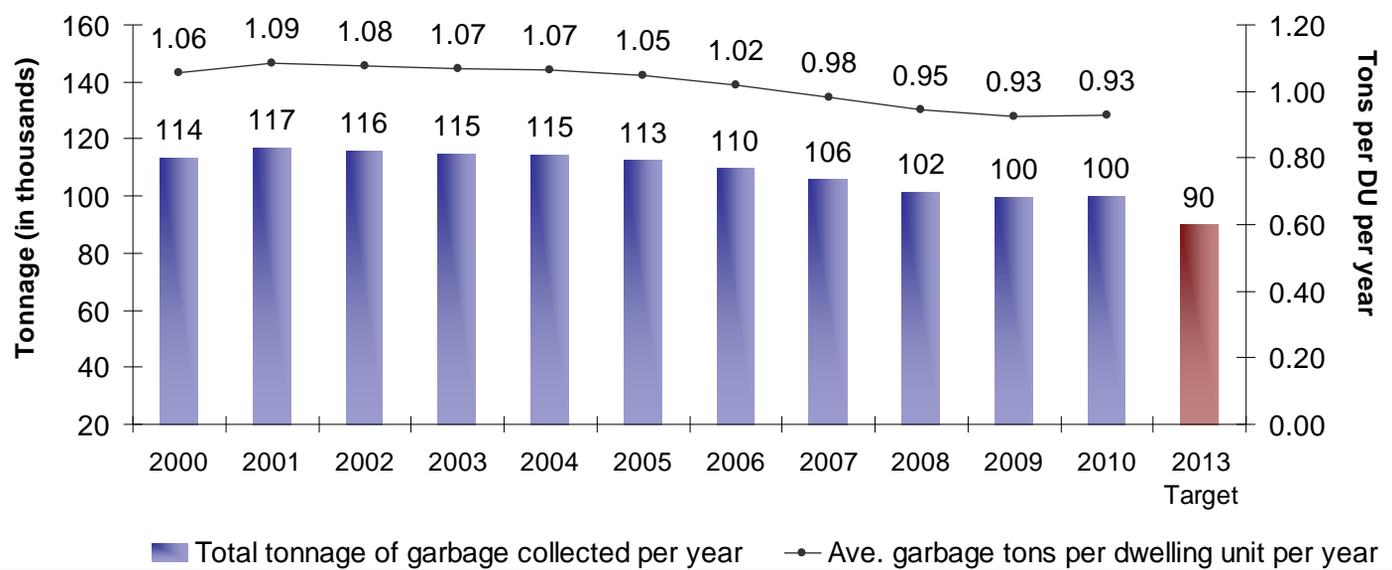
Why is this measure important?

The pilot programs for organics are providing information that will be used to develop specific operations, such as garbage and organics routes, if organics collection is to be expanded city-wide. The diversity of neighborhoods and the difference in neighborhood engagement of residents in the programs will help set expectations for participation, and assist in program design if expanded.

Neighborhood	Number of Households in Pilot Area	Est. Rental %
LINDEN HILLS	2,535	
EAST CALHOUN	569	
COOPER	59	20%
HIAWATHA	553	6%
HOWE	727	11%
LONGFELLOW	134	14%
PHILLIPS	198	69%
SEWARD	362	10%
VENTURA VILLAGE	21	0%

Goal: Reduce total tonnage of garbage collected

Total garbage tonnage collected annually per dwelling unit and Citywide

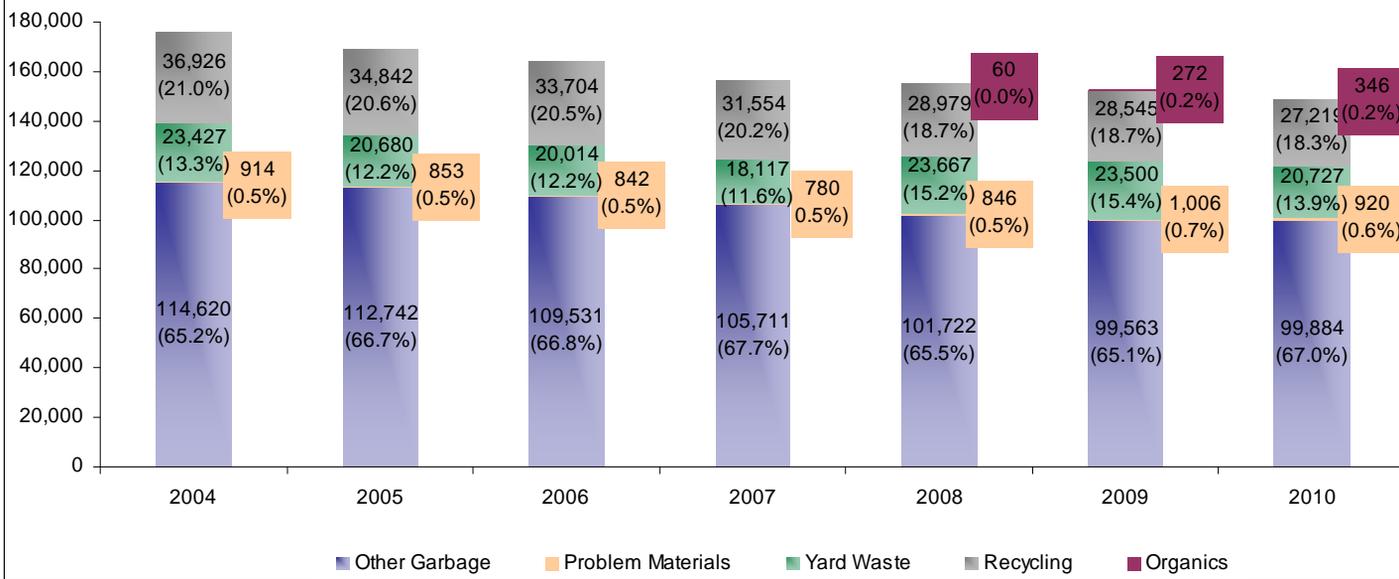


Why is this a priority? The chart above shows that the total tonnage of garbage is decreasing. (Total municipal solid waste, less recycling). The decrease in tonnage is due to several factors: reduced dwelling unit count, poor economy, and the adoption of better consumer habits in discarding all types of refuse.

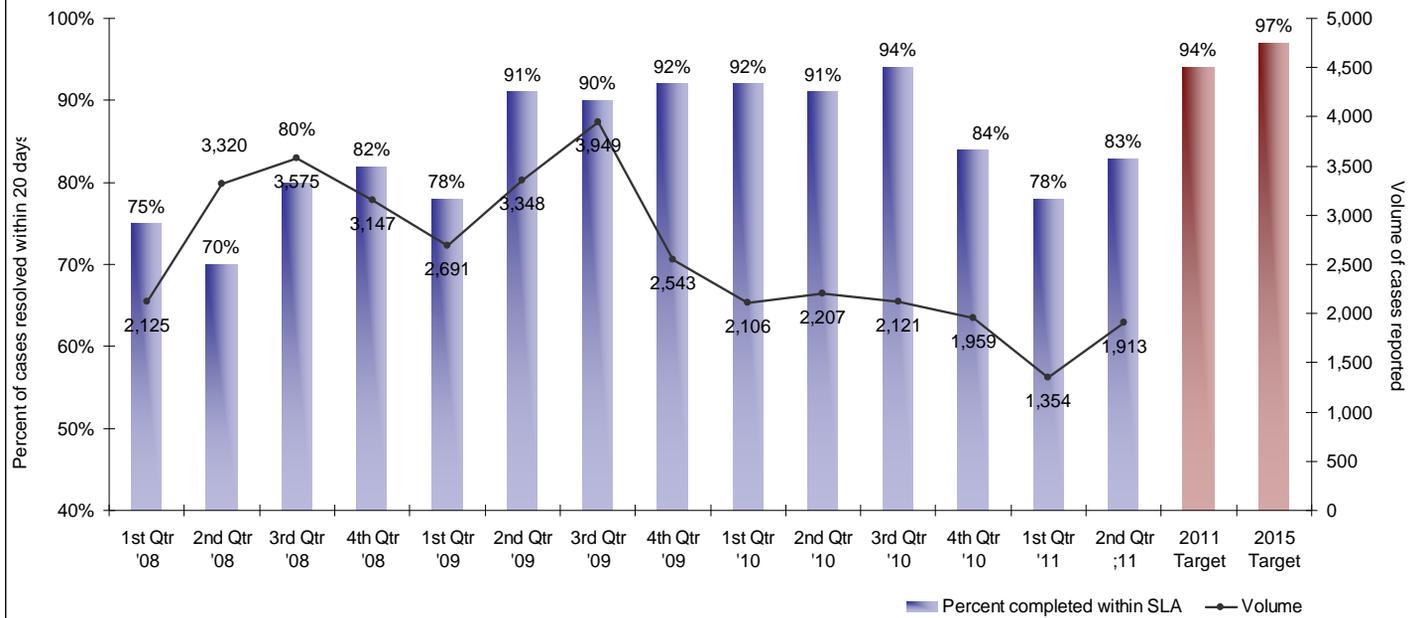
What strategy (or strategies) are you using to achieve this goal? The chart below shows the various categories of municipal solid waste that is collected and the percent of each in the entire waste stream, in the table that follows. This is showing that the tonnages of organics thus far in the organics pilots are insignificant in bringing down the total weight in the other garbage category.

NOTE: [Except for Clean City Graffiti removal services, most Solid Waste & Recycling services are reflective of services provided for only residential customers. That is for buildings with 4 or less dwelling units.]

Tonnage of all solid waste collected



Percent of graffiti cases completed within the service level agreement (20 working days)



Why is this measure important?

This measure is important because it reports the number of graffiti service requests and how many of these service requests have been completed by the Clean City crews, citizens or the building owners within a Service Level Agreement (SLA) of 20 working days. This SLA was established in July of 2007.

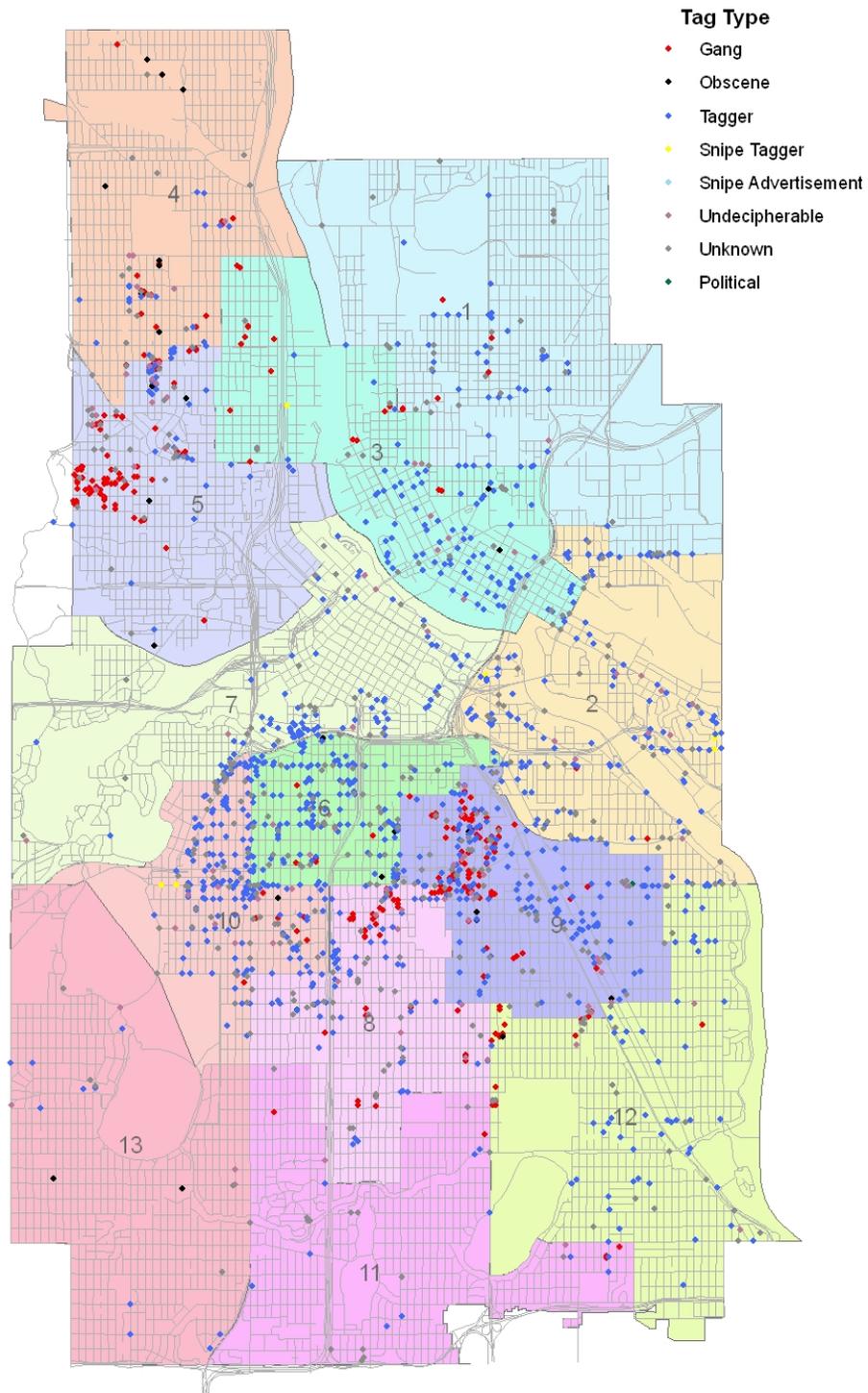
What will it take to reduce graffiti incidents?

Graffiti vandalism is a crime. As with other crimes, cooperative efforts between the police, citizens, the courts and Clean City efforts will be required to reduce graffiti incidents. However, communities that participated in the Innovative Graffiti Prevention Micro Grant program by educating residents about the negative effects of graffiti and by installing physical graffiti prevention measures such as growing vines, trellis systems and murals saw a measurable decrease in the number of graffiti occurrences that has stayed lower than pre-grant levels. In 2007 there were 13,507 graffiti cases, as compared to 12,107 in 2008, 12,477 in 2009, 8,523 in 2010, and 3,187 half way through 2011.

Why aren't more graffiti service requests resolved?

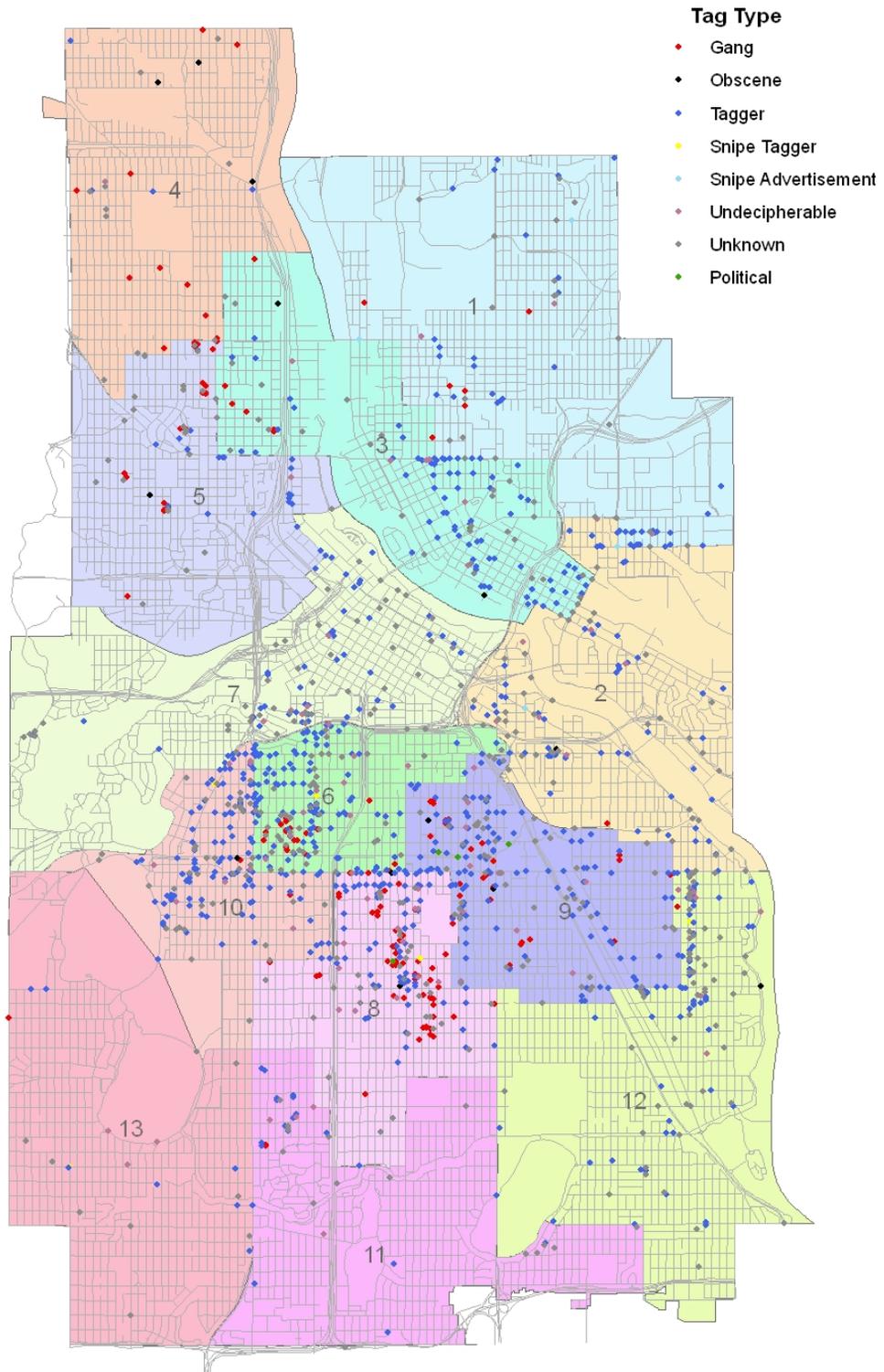
A graffiti case is completed when the City either has abated the graffiti or handed the case off to another entity, such as the U.S. Postal Service, Hennepin County, and MnDOT who are responsible for abating graffiti on their property. However, it is very difficult to know when or if the graffiti on these properties is abated.

City of Minneapolis 2nd Quarter 2010 Graffiti Service Requests



Data plotted represents Graffiti service requests deemed in the 2nd Quarter of 2010.
 This map is intended to show graffiti distribution only.
 Map created by Public Works, Management Services & Budget

City of Minneapolis 2nd Quarter 2011 Graffiti Service Requests



Data plotted represents Graffiti service requests cleaned in the 2nd Quarter of 2011.
 This map is intended to show graffiti distribution only.
 Map created by Public Works, Management Services & Budget

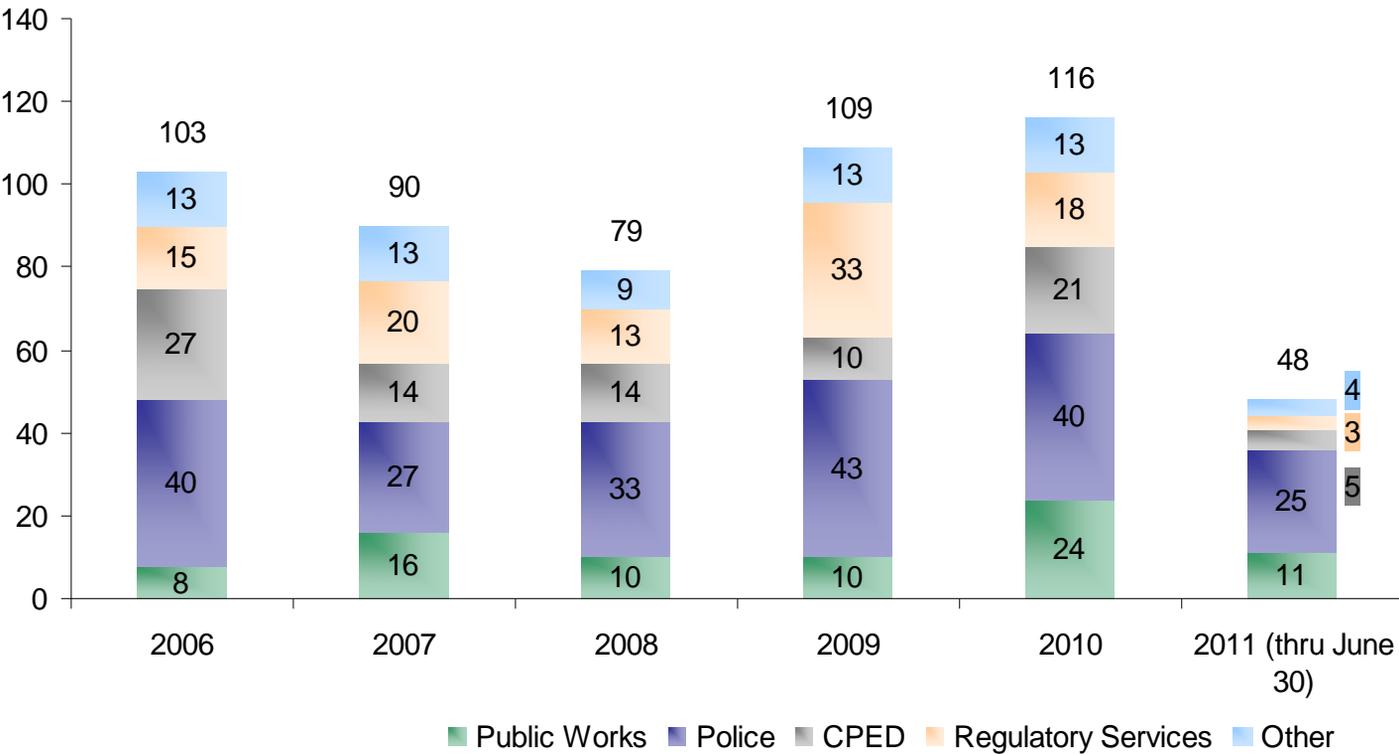
Appendix

Top 25 service requests Percentage meeting Service Level Agreement

Rank	Request Type	SLA	Jan 1- June 30 2011		Jan 1- June 30 2010	
			Service requests	Pct meeting SLA	Service requests	Pct meeting SLA
1	Pothole	12 Days	4,572	60.54%	3,298	68.04%
2	Exterior Nuisance Complaint	15 Days	3,270	93.85%	4,158	78.96%
3	Graffiti complaint / reporting	20 Days	3,262	79.25%	4,552	90.73%
4	Sidewalk Snow & Ice Complaint	21 Days	3,018	76.71%	4,931	70.74%
5	Parking Violation Complaint	5 Days	2,691	92.46%	2,611	89.97%
6	Abandoned Vehicle	14 Days	2,245	97.46%	2,535	99.29%
7	Residential Conditions Complaint	50 Days	1,701	97.12%	2,024	97.48%
8	Animal Complaint - Livability	7 Days	1,618	98.15%	1,891	99.52%
9	Snow & Ice Complaint	3 Days	1,474	55.43%	1,872	90.54%
10	Parking Meter Problem	3 Days	1,157	96.80%	1,265	98.81%
11	Zoning Ordinance Question	4 Days	1,042	99.23%	1,089	97.52%
12	Animal Complaint - Public Health	4 Days	997	95.09%	1,117	97.40%
13	Plan Review Callback	3 Days	974	97.54%	951	92.53%
14	311 Police Report Callback	3 Days	680	92.94%	593	97.30%
15	Debris in the Street or Alley	5 Days	584	31.16%	Not on 2010 top 25	
16	Rental License Follow-up	2 Days	551	99.82%	538	99.81%
17	Traffic Signal Trouble	7 Days	532	99.25%	499	96.19%
18	Repair Notice Question	2 Days	454	57.49%	411	63.26%
19	Complaint	5 Days	452	96.68%	430	93.49%
20	Street Light Trouble	12 Days	448	89.29%	468	82.26%
21	City Attorney Callback Request	3 Days	368	90.76%	455	87.03%
22	Residential Conditions Complaint Tenant	15 Days	342	90.64%	Not on 2010 top 25	
23	Residential Conditions Complaint HOD Tenant	15 Days	337	87.54%	345	87.25%
24	Sewer Issues	1 Days	306	58.50%	322	70.19%
25	Traffic Signal Timing Issue	5 Days	293	94.20%	338	81.36%

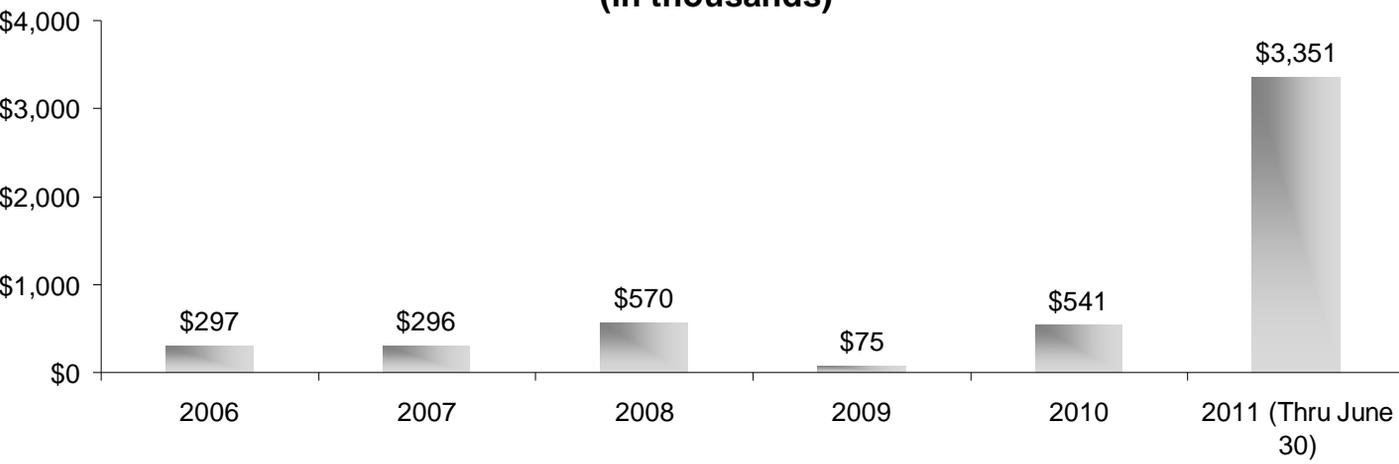
PW service requests

Adverse lawsuits opened against the City by department



Note: A number of the suits, for example involving CPED, are related to matters such as condemnation, property title clearance and the like that are not necessarily reflective of any risk management concerns for the City.

Public Works - Total liability payouts (in thousands)



2008 Judy Rye Case (\$315,782)
 2010 Collins Electrical Systems Case (\$350,161)
 2011 Pall Corporation - \$3,200,000

