

Municipal
Performance
Measurement
Program

SUMMARY OF 2001 RESULTS

December 2003

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This report summarizes Municipal Performance Measurement Program (MPMP) results contained in the Financial Information Return for the 2001 reporting year. It summarizes data reported by municipalities as of December 2003 and does not reflect subsequent changes in data by municipalities or returns submitted at a later time. Outlying results, including results that appear to contain an error in calculation, are not included in the summary statistics in order to provide more representative statistics. The report should not be relied on as a substitute for legal or professional advice, and the user is responsible for how the report may be used or applied.

Municipal performance measures are authorized under the *Municipal Act, 2001*. Every year the minister writes to municipalities, informing them of the formal requirements of the program, including a list of performance measures. The minister's letter and the annual list of performance measures are posted on the ministry's web site at www.mah.gov.on.ca under the heading, Municipal Performance Measurement Program.

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Part I:

Municipal Performance Measurement Program (MPMP)

Foreword

This document reports Municipal Performance Measurement Program results for 2001, the second year of the program.

Municipalities report performance measurement results annually to the public. Municipalities themselves are interested in how they stand relative to similar municipalities and many have been comparing performance measurement results on an informal basis. There has also been interest in a comprehensive survey of results done in a way that does not single out any individual municipality. The solution has been to group municipalities by geography and population and prepare summary statistics for each group.

This report is targeted at municipal administrators, elected officials and members of the public interested in a detailed presentation of performance measurement results and the factors affecting those results. The report is intended to enhance discussion about municipal service delivery and prompt municipalities to investigate best practices, such as those compiled by the Ontario Centre for Municipal Best Practices.

This is the first report summarizing Municipal Performance Measurement Program results and we encourage you to explore the document. Please address any comments to:

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Program

Many services Ontarians use and enjoy each day, including drinking water, fire protection, policing, garbage collection, recycling, roadways and public transit are provided by municipal government. Municipal councils are responsible for setting priorities on how tax dollars will be spent, including how much will be spent on each service area and what level of service is feasible for the available money. Decisions also reflect regulatory requirements and the need to limit municipal risk.

All Ontario municipalities share in the commitment to provide their taxpayers with good services and good value for money. But how can taxpayers, municipal councillors and municipal administrators evaluate municipal services?

One solution is to track a municipality's own performance year after year. Another approach is to compare the municipality's results with those of other, similar municipalities.

Municipalities have a long history of reporting financial and statistical information to the province following the end of every calendar year. From this information we know how much a municipality spends on broad service areas like fire protection or garbage collection. But, this does not provide insight into how efficiently or effectively the municipality delivers services or local circumstances.

To provide municipal administrators, residents and municipal councils with information that can help them evaluate service delivery, the Ontario government introduced a new and innovative program to measure municipal performance in 2000. The Municipal Performance Measurement Program (MPMP) is the first comprehensive program of its kind in North America. In 2001, all Ontario municipalities provided information on the efficiency and effectiveness of municipal services in nine key areas:

- Municipal government
- Fire protection
- Police services
- Roadways
- Public transit
- Drinking water
- Wastewater (Sewers)
- Solid waste
- Land use planning

These service areas were selected initially because they are primarily a municipal responsibility and represent a high percentage of the municipal budget. Another consideration was that municipalities already collect most of the data needed to calculate performance measures for these services.

Advisory Committee

At the end of the first year of the program, the Ministry of Municipal Affairs formed a Municipal Performance Measurement Program Advisory Committee to guide the development of the program. The Advisory Committee consists of representatives from municipal associations such as the Association of Municipalities of Ontario, the Ontario Municipal CAO's Benchmarking Initiative (OMBI) and staff from a group of representative municipalities. Specialized working groups reviewed all performance measures and made extensive recommendations to redefine and improve the measures. These changes were implemented for the 2001 reporting year. Measures continue to be reviewed annually to improve instructions, and if need be, formulas.

Municipalities Report Results to the Public

Every year, every municipality provides information on its performance measurement results to the province and its residents. Many municipalities provide performance measurement information on their web sites. Others take out newspaper ads, mail the information or include performance measurement information in the property tax bill. The objective is for municipalities to share information with taxpayers. This can enhance conversations between taxpayers and their elected representatives about local priorities and results.

Benefits

The benefits of reporting performance measurement results to the public are significant: ranging from improved accountability to improved service delivery. How? Reporting to the public should generate public interest in the decisions council makes, encouraging further communication. Municipalities are interested in how other municipalities are doing, generating informal comparisons and discussions about the details of service delivery.

Performance measures focus on results and can help council evaluate how well budget decisions achieved municipal goals. Municipal staff can translate goals into performance measurement targets. Performance relative to goals can help council determine whether to reallocate tax dollars between competing services.

Table 1: Benefits of Municipal Performance Measurement Program

Municipal Performance Measurement Program

What MPMP is:

- **Management tool.**
Municipalities can track performance over time.
- **Comparable.**
Standardized definitions and formulas for performance measures make comparisons possible between municipalities.
- **Balanced information.**
Information is provided on both service quality and costs for most services.
- **Universal.**
All Ontario municipalities responsible for a service report performance measures on that service.

What performance measurement encourages:

- **Accountability.**
Reporting to the public improves municipal government accountability to taxpayers.
- **Communication.**
Encourages discussion between taxpayers and council.
Encourages discussions between municipalities.
- **Priority setting.**
Performance measures can assist council in setting priorities and allocating tax dollars to services in the municipal budget.
- **Monitoring the municipal budget.**
Performance measures help monitor whether budgeted costs and expected service levels are met.
- **Focus.**
Attention is focused on results, leading to closer review of how service is delivered, how well it is delivered, what it costs and impacts on the community.
- **Setting targets.**
Improvements in performance can occur simply by setting clear, measurable targets.
- **Best practices.**
Performance measures are a starting point for identifying best practices, such as those researched and identified by the Ontario Centre for Municipal Best Practices.
- **Improved service delivery.**
Improved communication, setting targets, comparisons, a focus on service, and access to a directory of best practices can lead to improved service delivery.

Simply measuring a service in a regular, consistent manner focuses attention on a service and this focus is the beginning of service improvements. Improvements can take the form of lowering the cost of service delivery, changing the level of service or finding a better way of doing business.

Best Practices

Performance measures are also a starting point for the identification of municipal best practices. The Ontario Centre for Municipal Best Practices is a virtual electronic library of best practices. The Centre uses Municipal Performance Measurement Program results as a starting point for identifying municipalities for in-depth follow-up. The Centre researches, identifies and posts best practices on their web site: www.municipalbestpractices.ca. Municipalities are encouraged to review the practices posted and determine which are applicable to their own circumstances. This encourages the transfer of operational experience between municipalities.

Measuring Both Efficiency and Effectiveness

Performance measures look at two dimensions of service delivery—efficiency and effectiveness.

Efficiency measures provide information on the cost of delivering services. For example, we can measure the day to day costs of treating drinking water. This provides a standard measurement that applies to all municipalities, regardless of population.

However, efficiency measures tell only part of the story. Residents also want to know about the quality of service. Effectiveness measures describe performance relative to a goal. For drinking water, municipalities report the weighted number of days when a boil water advisory, issued by the Medical Officer of Health and applicable to a municipal water supply, was in effect. Together, the efficiency and effectiveness measures provide a more complete picture of what is spent and what is achieved given local conditions. Many municipalities include a brief description of local circumstances in their report to taxpayers. Local circumstances affect results and should be considered in any comparison of outcomes between municipalities. For example, geography and micro-climate are factors influencing the efficiency and effectiveness measures for winter maintenance of roadways.

Table 2: How to Tell Efficiency & Effectiveness Measures Apart

How to Tell Efficiency & Effectiveness Measures Apart

Efficiency measures

- Often described as inputs/outputs.
- Inputs are usually dollars.
- Often expressed as cost per unit.
 - Operating costs for paved roads per lane kilometre.
 - Operating costs for solid waste diversion (recycling) per tonne or per household.

Effectiveness measures

- Measure quality.
- Measure extent to which a goal is achieved.
- Often expressed as a percentage.
 - Percentage of paved lane kilometres where the condition is rated as good to very good.
 - Percentage of residential solid waste diverted.
- Also expressed as a rate using 2 different kinds of units.
 - Property crime rate per 1,000 persons.
 - Number of conventional transit passenger trips per person in the service area in a year.

Who Reports a Measure

Under the Municipal Performance Measurement Program, municipalities complete a measure only if their level of government is responsible for the service. For example, if a regional municipality in Southern Ontario is responsible for wastewater treatment, only the regional municipality reports the measure. Local area municipalities do not report the measure. If both the regional government and the local government share responsibility for delivering a service, such as winter maintenance of roadways, both the region and the local area municipalities report the measure.

In both the North and South, single-tier municipalities are responsible for all municipal services delivered to residents, with the exception of social and health services delivered by Consolidated Municipal Service Managers or District Social Services Administration Boards. Regardless of whether single-tier municipalities contract out a service, provide it jointly with other municipalities or provide it in-house, they report performance measures which correspond to the services they deliver.

Table 3: How to Present MPMP Results?

How to Present MPMP Results?

Challenge

How to report results in a way that does not identify individual municipalities?

Solution

- Group municipalities. Municipalities already report their own results to the public. Emphasis on aggregate results encourages municipalities and the public to explore why a municipality's own performance varies from the median.

Challenge

How to create groups that allow taxpayers to instantly locate their municipality?

Solution

- Group municipalities by North and South.
 - In South, create separate groups for regional municipalities and counties.
 - Group single-tier and lower-tier municipalities by population.
 - Also, calculate statistics for all municipalities reporting a measure.
-

Presenting Results for 2001

Municipalities are required to report results to their taxpayers annually. However, there has also been interest in a comprehensive survey of results done in a way that does not single out any individual municipality. Municipalities are affected by many local factors such as demographics, geography, urban/rural mix and assessment base. By grouping municipalities by geography and population, it is possible to see patterns in results. The range and median allow municipalities to compare their own results with other, similar municipalities.

How to Find Your Municipality's Group

Table 4: Municipal Groups Used in Summary

Municipal Groups	Number of Municipalities
North	
<5,000	129
5,000 – 19,999	14
40,000 – 100,000+	4
South	
Regions and former regions	12
Counties	22
Lower-tiers and single-tiers:	
<5,000	72
5,000 – 9,999	73
10,000 – 19,999	66
20,000 – 39,999	21
40,000 – 99,999	20
100,000+	15
All Municipalities	448

To evaluate results, two major groups were established: Northern Ontario and Southern Ontario. Northern Ontario can be distinguished from Southern Ontario on many dimensions. It is primarily rural, is characterized by more dispersed settlement patterns, and higher costs for municipal service delivery relative to Southern Ontario. Northern municipalities are organized as single-tier municipalities with

the exception of the District of Muskoka. In the Summary of Results, Northern municipalities are divided into three population groups. Note that there were no municipalities with populations between 20,000 and 40,000 in 2001.

In the South, several forms of municipal government exist: single-tiers, upper-tiers (regions and counties) and lower-tiers or local municipalities. Please see a discussion of municipal government structure in the section, In Depth—Municipal Government Structure.

Because upper-tier governments have responsibilities distinct from local area municipalities, separate groups have been created for regions and counties. The group called “regions and former regions” includes the following single-tier municipalities which were previously regional governments: the City of Toronto, the City of Ottawa, the City of Hamilton and the City of Greater Sudbury. Note that while the County of Haldimand and the County of Norfolk retain the name of “County”, they are organized as single-tier cities and are grouped with lower-tiers and single-tiers in the South due to their relatively small population size.

The District of Muskoka and the City of Greater Sudbury are located in the North but have traditionally been included in Southern Ontario for purposes of ministry financial analysis. Note that the District of Muskoka has a two-tier regional style government although it is described as a District.

Also, the County of Oxford functions as a regional municipality and has traditionally been analyzed with regional municipalities. It is therefore included in the group, regions and former regions.

Local municipalities and single-tier municipalities in the South are grouped together and divided into six groups based on population.

By organizing results by geography and population, a person can immediately determine where his/her own municipality is and how results for the group compare with the results published by the municipality.

Measures Refer to a One Year Time Period

Every performance measure is based on data for a one year period—the 2001 calendar year. The calendar year is used because it corresponds to the municipal fiscal year. As an example, the property crime rate per 1,000 persons is based on the number of actual incidents of property crime reported during 2001. A few measures specifically refer to the one year time frame in the description of the measure, but most do not. An example of a measure that refers to a year is the number of wastewater main backups per 100 kilometres of wastewater main in a year. In this measure, the year reference is added to clarify that data is based on a one year period as opposed to one month.

Table 5: Check List for Comparisons

Check List for Comparisons	
Local Circumstances	Demographics and Physical Characteristics of Municipality. ✓ Population and population growth. ✓ Demographics. ✓ Geography: North/South. ✓ Urban/Rural. ✓ Climate. Local Cost of Doing Business. ✓ Local wage rates, cost of materials, cost of transportation, whether there is a competitive market for service providers. ✓ Contract provisions. Other Circumstances. ✓ See notes to Municipal Performance Measurement Program results reported by municipality to taxpayers.
Council Decisions and Budget	Council Decisions on Service Level. ✓ Service level. ✓ Whether service is delivered to all or part of municipality. Example: sanitary sewer service provided only to urban areas. Council Decisions on How Service is Delivered. ✓ In-house, contracted out, joint service agreements with other municipalities, etc. Municipal Budget. ✓ Size of municipal budget. ✓ Assessment base including residential, farm and commercial/industrial mix. Assessment growth.
Two-Tier Municipal Government in South	Recognize that Single-tiers are Different from Lower-tiers. ✓ Although lower-tiers and single-tiers in the South are grouped together, they have different municipal structures and responsibilities. Similarly, regions that became single-tiers have added responsibilities. Cases of Shared Responsibility. ✓ If responsibility for a service is shared by two levels of government in a two-tier system, the services performed will influence operating costs and efficiency results.

Check List for Comparisons	
Service Area Measured	Factors Specific to Each Service. ✓ See list of factors for every measure. Age of Infrastructure. ✓ An aging infrastructure may result in higher costs for repairs and rehabilitation; effectiveness measures may be influenced. Example: paved roads.
Reporting Issues	Reporting in Financial Information Return. ✓ General government categories used. ✓ Method of allocating indirect costs included in general government to other services. ✓ Whether administrative costs for a department are included. Example: Are administrative costs for the transportation department included in the cost of paved roads? ✓ Errors in reporting, including errors in calculations, e.g. megalitres of water. ✓ Data estimated versus data precisely measured.
Summary Statistics	Number of Municipalities Reporting a Measure. ✓ If few municipalities report a measure, results have limited use for comparisons.

Making Comparisons

Municipalities have been placed into groups that recognize geography, population and the presence of two-tier government in Southern Ontario. This helps encourage comparisons between similar municipalities. Table 5 provides a more detailed look at the factors that should be weighed when considering which municipalities should be compared to your municipality. The Check List for Comparisons is organized into six areas: local circumstances, council decisions and budget, two-tier municipal government in South, service area measured, reporting issues and summary statistics.

Service level decisions are crucial and are linked to the size of the municipal budget. Municipal budgets are themselves linked to the assessment base on which property taxes are levied. There are significant differences between municipalities which reflect the mix of residential, farm, commercial and industrial properties.

Financial reporting practices, including the treatment of indirect costs also have a significant impact on results. Please see the In-depth feature on indirect costs.

Statistics

For the province as a whole and for each group of municipalities, the median or 50th percentile, 25th percentile, 75th percentile and range are calculated. These statistics allow a municipality to evaluate its own results relative to those of other municipalities. The percentiles are displayed as a table and the median is shown as a bar graph. A frequency distribution is also included to provide an overview of the results from all municipalities. In order to report meaningful results, the data set used to calculate these statistics excludes municipalities which appear to have made an error in calculation.

Range

The range measures the spread of the data. The range is presented as the minimum or lowest value and the maximum or highest value.

Median or 50th Percentile

While people are familiar with averages, the median provides a statistic that measures the middle value in a group, without being influenced by extreme values.

In a data set which is ordered from low to high, the median is the measurement in the middle. Half the measurements will be below the median and half will be above it.

25th Percentile

In a data set which is ordered from low to high, 25% of the performance measurement results will be below the result at the 25th percentile and 75% will be above it.

75th Percentile

In a data set which is ordered from low to high, 75% of the performance measurement results will be below the result at the 75th percentile and 25% will be above it.

Evaluating Percentile Results

Superior results will vary with the measure. For efficiency measures, results at the 25th percentile will represent very low costs per unit. For effectiveness measures, the best results could be at either end of the percentile scale. For the measure, violent crime rate per 1,000 persons, the result at the 25th percentile will represent

a better outcome. For the measure, percentage of residential solid waste diverted, the result at the 75th percentile will represent a higher percentage of solid waste recycled.

Number of Municipalities Reporting the Measure

The number of municipalities reporting a measure varies from measure to measure. The number excludes municipalities which made an error in calculation. The most significant errors are described in the results table for each measure.

Before comparing the median result with your municipality's result, it is important to know how many municipalities in the group reported the measure. When only a small number of municipalities report a measure, the summary statistics will be less reliable for making comparisons.

For example, if only three municipalities report a measure, the lowest result is reported as the 25th percentile, the middle result is the median and the highest result is the 75th percentile in the table of results for each measure. If only two municipalities report a measure, the lowest value is reported as the median and the highest value is reported as the 75th percentile in the table of results. If only one municipality reports a measure, the value is reported as the median.

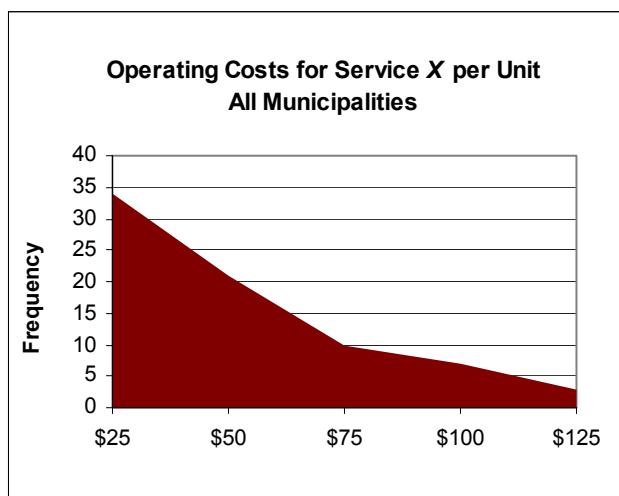
Frequency Distribution

Each measure is also graphed as a frequency distribution in order to show how all the results are concentrated. In a frequency distribution, results are arranged in groups and the number of results within each group is counted (frequency).

Example: 75 municipalities report an efficiency measure and the data ranges from \$2.04 per unit to \$121.50 per unit. Equal intervals are created to accommodate the range of data. Next, the number of results that fall within each interval is counted—this is the frequency.

Intervals	Frequency (count)	Label on x-axis
\$0.00 to \$25.00	34	\$25
\$25.01 to 50.00	21	\$50
\$50.01 to 75.00	10	\$75
\$75.01 to \$100.00	7	\$100
\$100.01 to \$125.00	3	\$125

The frequency distribution is graphed in Figure 1.

Figure 1: Example of Frequency Distribution

The number of municipalities reporting results within each interval is reported on the y-axis. The intervals representing unit cost are shown on the x-axis. The top value in each interval is represented.

Looking only at the graph, we can see that about 34 municipalities had unit costs between \$0.01 and \$25.00. Around 20 municipalities had unit costs between \$25.01 and \$50.00.

Note that a frequency distribution will vary from measure to measure because it reflects the data actually reported by municipalities. As a reference, a “normal distribution” is symmetrical and resembles a bell.

For a few effectiveness measures, where municipalities may report a result of zero, the first interval in the frequency distribution is zero. An example is the weighted number of days when a boil water advisory is in effect. For all other measures, the first interval is represented by the highest value in a group. For example, if an interval contains all values from \$0.00 to \$25.00, the interval is represented as \$25.00 on the x-axis. The second interval is represented as \$50.00 and contains all values from \$25.01 to \$50.00.

Graphs, Tables and Explanations

Results for each measure are displayed as a table, a bar graph and a frequency distribution. See the beginning of the DATA section for a discussion of how to read the results. In Part II, Summary of 2001 Results, the section for each service area contains the objective of the measure and a list of factors that influence results.

Municipalities themselves described these factors in the notes

accompanying the performance measurement schedules in the Financial Information Return.

**TIP:**

Performance measures are fractions.
Look for the formula for each measure.

Sifting Through the Raw Data

The raw data reported for each measure is examined for errors before it is included in the Summary. Staff looked for errors in the reporting of the numerator and the denominator. Errors in either can lead to artificially low or high results.

If a result appeared unusual, staff checked the Notes schedule and the schedule on cross boundary service delivery for additional explanatory information. If no explanation was provided for the “outlier”, the result was excluded from the statistics for the measure. The performance measure was also earmarked for follow-up by ministry staff.

Following Up Performance Measurement Results

Trend Over Time

Most performance measures reported for the 2001 reporting year use the same formulas and definitions as the measures for 2002. This means municipalities can begin to track their own performance over time. However, if a municipality changed its method of allocating indirect costs in 2002 or moved to the new set of general government categories (governance, corporate management, program support), then results for 2001 and 2002 are not directly comparable. Please see the section entitled In-Depth—Indirect Costs.

Trend over time is a valuable analytical technique. Municipal performance normally does not change radically from year to year. Instead, it tends to change gradually, either positively or negatively. The cumulative effect of small changes can indicate a trend that should be followed up.

Comparing Municipal Performance to Summary Statistics

The median, 25th percentile, 75th percentile and the range help a municipality position its results relative to other municipalities in the North or South of similar population size. The frequency distribution can help a municipality locate itself relative to all municipalities reporting the measure.

Efficiency Measures are “Broad Brush” Measures

In the Municipal Performance Measurement Program, efficiency measures are based on overall costs for broad service areas: fire services, conventional transit, garbage collection, etc. These macro measures provide an indication of the overall cost per unit. Over time, a trend may become evident. Further investigation is required to determine why spending per unit has changed. In short—performance measures help identify areas that need attention.

Results: What Do They Mean?

Snap judgments suggesting that results are simply good or poor are not appropriate in performance measurement. A municipality needs to determine why performance exceeds expectations or falls below expectations. Both kinds of results are worth investigating. Certainly, a municipality would be interested in performance that was below expectation because it would want to discover ways to improve results. But it should be equally interested when performance exceeds expectation because it would want to repeat good performance and identify practices that it could copy elsewhere in its operations.

Trade-offs between Efficiency and Effectiveness

Spending trends should be viewed in tandem with effectiveness results. If spending per unit has decreased over time, what is the corresponding impact on effectiveness results?

Evaluating both efficiency and effectiveness results can highlight trade-offs between spending and service quality. There are several ways to balance cost and quality:

- Increasing effectiveness by increasing unit cost.
- Increasing effectiveness while holding unit cost constant or reducing unit cost.
- Keeping effectiveness constant while reducing unit cost.
- Reducing unit cost by reducing effectiveness standards or service levels.

Most municipalities are likely to find the second method the most preferable and the last method the least preferable, but all methods represent opportunities for balancing cost and quality.

Setting Municipal Performance Targets

Municipalities may set local targets for efficiency and effectiveness results. Setting performance targets does not mean that a standard will always be met. But it does mean that a process of target setting and monitoring is put in place. Measuring a service focuses attention on it and this attention can lead to improvements. Simply put—what gets measured, gets done.

Targets are affected by local circumstances and should be realistically set. When setting targets for the next fiscal year, municipalities should consider their long-term strategic plans, how much money is available, council's policy priorities, service demand and local circumstances.

IN DEPTH

Reporting Data to the Province

Data for the Municipal Performance Measurement Program is collected through the Financial Information Return (FIR) submitted annually by municipalities to the province. The Financial Information Return includes separate sections for efficiency (Schedule 91) and effectiveness (Schedule 92). A special section for notes (Schedule 93) allows municipalities to qualify their information and explain local circumstances that may have influenced efficiency and effectiveness results. A section is also provided on cross boundary service delivery (Schedule 95). This helps clarify the level of government responsible for a service and any contractual or joint service agreements between municipalities. Additional data, such as the number of kilometres in the municipal road system, is collected and assists in verifying data in the numerator and denominator (Schedule 94). Detailed instructions for the completing these schedules is provided to municipalities.

Edit Rules

Edit rules are formulas built into the Financial Information Return that check entries. Edit rules have been created specifically for the efficiency and effectiveness measures. An error message is triggered if an inconsistency is detected or important information is not reported. Edit rules allow a municipality to self-correct an entry before the Return is submitted to the province and contribute to the overall accuracy of the Financial Information Return.

Although edit rules identify many errors, they cannot identify all mistakes. There may also be legitimate reasons why a result is higher or lower than the results for other municipalities in the same group. Explanatory notes in the performance measurement section of the Financial Information Return can help ministry staff determine whether an outlying result is legitimate or due to a calculation error.

In Part II, Summary of 2001 Results, tables and graphs are provided for each measure. In each table a list of conditions is provided. Conditions were used to exclude errors. It should be noted that since 2001 was only the second year of the Municipal Performance Measurement Program, municipalities were still familiarizing themselves with formulas and definitions.

Local Quality Assurance Issues

A variety of quality assurance activities occur in a municipality prior to submitting data for performance measurement in the Financial Information Return. Considering the factors in Table 5, each municipality compiles data using a variety of processes and review procedures that allow staff to assess the quality, completeness and accuracy of reported results. As these processes and the related performance reporting standards and tools evolve, summary reports like this one will provide new insights and more insights about performance.

IN DEPTH

Efficiency Measures: Operating costs

In the Municipal Performance Measurement Program, efficiency measures are usually expressed as cost per unit and are based on operating costs only.

Capital costs are not included because municipalities are required to expense all capital costs in the year in which an asset (land, equipment, buildings) is acquired. Capital costs also include major construction projects such as roadways or sewer systems. From year to year, capital expenditures may seem uneven, inflated in some years, low or non-existent in others. In the future, it is expected that municipalities will report capital assets on the balance sheet, and depreciate them every year. At that time, capital costs could be logically included in efficiency measures.

For each service, information is collected using these cost categories:

- ✓ Salaries, wages and employee benefits.
- ✓ Materials.
- ✓ Contracted services.
- ✓ Rents and financial expenses.
 - Transfers to own funds (reserves, reserve funds, capital fund).
 - External transfers (to individuals and organizations).
- ✓ Interfunctional adjustments (transfers between departments and overhead allocated to other services).
 - Principal and interest payments on long term debt.

The costs marked with a ✓ are used to calculate operating costs, the numerator for the efficiency measures. Note that principal and interest payments on long term debt and transfers to own funds are not included in the definition of operating costs. Consequently, the way a municipality funds its capital projects does not influence performance measurement results.

External transfers are payments which are beyond the control of the municipality, such as general welfare assistance. Therefore, these costs are excluded.

Costs are Reported on a Gross Basis

Operating costs are reported on a gross basis for the efficiency measures. This means that revenues from user fees and grants from the provincial and federal governments are not subtracted from operating costs. User fee policies vary from municipality to municipality. If user fees were netted out, those municipalities with a policy of extensive user fees would appear to have lower costs per unit.

Provincial grants include grants for specific services as well as unconditional grants which may be used as the municipality sees fit to meet municipal priorities. Since these unconditional grants cannot be matched to a specific service, grants are not netted out.

Exception: Netting Out Revenues Received from Other Municipalities

Under the Municipal Performance Measurement Program, if a municipality is responsible for delivering a service, the municipality reports the related performance measures. Some municipalities are responsible for a service, but choose to purchase the service from another municipality and enter into an appropriate contractual agreement. The municipality that acts as a service provider receives payment, or revenue, for its services. This municipality is permitted to subtract the revenue received from other municipalities from its operating costs.

Exception: Netting Out Revenue from the Sale of Resources Related to Garbage Disposal and Recycling

A working group of municipal staff experts that reviewed the solid waste measures felt that solid waste contracts within the municipal sector had an important component related to the sale of resources. The sale of resources related to disposal and diversion activities includes electricity production and landfill gas, landfill gas credits and royalties. Typically, contractors keep revenue from the sale of resources related to disposal and diversion activities as part of the contract. Therefore, revenue from the sale of resources is subtracted from operating costs for the solid waste measures for disposal, diversion and solid waste management. Note that tipping fees and user fees for garbage collection are not netted from operating costs since user fees are not netted out from operating costs for other service areas.

IN DEPTH

Indirect Costs

Indirect costs are costs for services that are used by many departments of a municipality. Typically these include human resources, payroll, mailroom, etc. How indirect costs are allocated to different service areas can have a material impact on efficiency results. Indirect costs can be reported under general government or they can be included in the costs of each service area.

Before Municipal Performance Measurement Program (MPMP) schedules were added to the Financial Information Return, there was no policy concerning the treatment of indirect costs. It was left to each municipality to decide whether to include indirect costs in the cost of general government or include them in the cost of individual services. If a municipality chose to allocate indirect costs to services, it could use any allocation method.

When MPMP was introduced, it became very important to standardize the way municipalities handled indirect costs. Otherwise, a municipality that reports all indirect costs as part of general government will have high operating costs for general government. This will affect efficiency results—operating costs for general government as a percentage of total municipal operating costs will be higher. In addition, the municipality will have lower operating costs for other services and lower unit costs.

Standardizing the Allocation of Indirect Costs

The ministry recognized that the treatment of indirect costs would need to be standardized to enable true comparisons of efficiency measures. The ministry examined methods for allocating indirect costs and reviewed how general government costs were reported. The ministry was particularly interested in the work being done by the Ontario Municipal CAO's Benchmarking Initiative (OMBI). OMBI proposed dividing general government costs into three categories:

- Governance.
- Corporate management.
- Program support.

Program support was defined as indirect costs that should be allocated to other service areas. Examples include information management, payroll, printing and graphics. Corporate management was defined as administrative costs that are less easily allocated. Examples include legal support, investments and

corporate communication. OMBI recommended corporate management not be allocated to other services.

OMBI also proposed that large municipalities use a method of allocating indirect costs based on the consumption of different program support services by municipal departments. For example, each department would be allocated a percentage of the costs of printing services—based on the number of impressions it ordered. These concepts were accepted and are being phased in.

Table 6: Moving to Standardized Reporting of Indirect Costs

Moving to Standardized Reporting of Indirect Costs

2001

- Transition year.
- Municipalities choose a set of general government categories:
 1. Members of council, general government support, corporate overhead; OR
 2. Governance, corporate management, program support.
- Municipality reports the efficiency measure for general government that matches the general government categories used.
- Municipalities asked to allocate general government costs to other services. Amount allocated reflects general government categories used. Subtotal for general government costs allocated if set includes members of council; program support allocated if set includes governance.
- Municipalities free to choose the method of allocating general government costs.

When making comparisons, please be aware that differences in general government categories and differences in the method of allocating general government costs affect results.

2002

- All municipalities required to use the general government categories of governance, corporate management, program support.
- All municipalities are to allocate program support to other services.
- Municipalities with populations of 100,000 or more to use their best efforts to use the OMBI allocation method.
- Municipalities with populations under 100,000 are to use an allocation method based on operating costs for a service area as a percentage of total municipal operating costs.

IN DEPTH

Municipal Government Structure

The *Municipal Act, 2001* recognizes three types of municipalities: upper-tier municipalities and lower-tier municipalities within a two-tier municipal system, and single-tier municipalities which are not part of a two-tier system.

In two-tier systems the upper-tier municipality, either a county or a regional government, delivers certain services to local municipalities within its boundaries. The intent is to deliver services used by all or most local municipalities more efficiently and effectively.

Two-tier governments exist only in Southern Ontario—with the exception of the District of Muskoka. The District of Muskoka is traditionally grouped with regional governments in the South for purposes of analysis. All municipalities in Northern Ontario are single-tier municipalities.

Counties

The county is the older and more common form of upper-tier municipality. Counties have traditionally been a federation of the townships, towns and villages within the same geographic area. Cities were not originally part of the county structure, although some have joined the county structure in recent years. The County of Oxford has a municipal structure similar to that of regional governments although it is a county. The County of Oxford is traditionally analyzed with regional municipalities for purposes of ministry financial analysis. Therefore, it is included in the group of regions and former regions in this Summary.

Regional Municipalities

Regional municipalities are restructured two-tier governments established in the postwar period. Metropolitan Toronto was created in the 1950s; 12 others were created in the 1960s and early 1970s. Regional government is a modified, stronger form of the county structure and regional municipalities have significantly greater responsibilities than counties.

Separated Cities

There are 15 separated cities in Southern Ontario plus 4 separated towns and 1 separated township. These separated municipalities are not represented on county council. However, in the past, some common services, such as homes for the aged, were usually provided by joint local boards. All municipalities in the North, with the exception of the District of Muskoka, are separated municipalities. The powers of single-tier municipalities vary for historical reasons, depending on how and when they were created.

In 2001 a number of single-tier municipalities were created from former regional municipalities: the cities of Toronto, Ottawa, Greater Sudbury, Hamilton, and the counties of Haldimand and Norfolk. Note that Haldimand and Norfolk are cities with single-tier status although they are called counties.

Northern Ontario

Northern Ontario is divided into 11 territorial districts which are administrative areas, not municipalities. The exception is the District of Muskoka which has a two-tier, regional type of government. All other municipalities in Northern Ontario are single-tiers. This includes the former Regional Municipality of Sudbury which amalgamated with area municipalities in 2001 to become the single-tier municipality of Greater Sudbury. Note that the District of Muskoka and Greater Sudbury have traditionally been analyzed with regional municipalities in Southern Ontario for purposes of ministry financial analysis. Therefore, these municipalities are grouped with Southern Ontario regions and former regions in this Summary.

Much of Northern Ontario is unorganized for municipal purposes. The Ministry of Northern Development and Mines assists inhabitants of unorganized territories set up local service boards to deliver basic services.

Consolidated Municipal Service Management

Consolidated municipal service management was introduced in 1997 to ensure that certain social and health services are planned and administered on a regional basis, whether a two-tier system is in place or not. Consolidated municipal service management is delivered by Consolidated Municipal Service Managers in the South (CMSMs) and by District Social Service Administration Boards in the North (DSSABs).

In the South, Consolidated Municipal Service Managers (CMSMs) are responsible for the delivery of social assistance, child care, and social housing, at a minimum. Consolidated Municipal Service Managers may also be given responsibility for land ambulance services, public health and the administration of portions of the *Provincial Offences Act*.

In Southern Ontario, 36 service areas were established and one municipality in each area was designated as the Consolidated Municipal Service Manager. All regional governments (some of which have since become single-tiers) and most county governments were designated. Separated municipalities have an agreement with the county in their area on the designation of the Consolidated Municipal Service Manager.

In some cases, municipalities other than the Consolidated Municipal Service Manager have been designated as service delivery agents for land ambulance and the administration of *Provincial Offences Act* services. To date, only regional governments and their successors have been given responsibility for public health.

In Northern Ontario, the City of Greater Sudbury was designated as a Consolidated Municipal Service Manager and 10 District Social Services Administration Boards (DSSABs) were created to serve the rest of the North. District Social Services Administration Boards are responsible for serving both municipalities and unorganized territory. At a minimum DSSABs manage the delivery of social assistance, child care and social housing and have the option to deliver land ambulance and public health.

Northern municipalities and the unorganized territories in their area also have the option to form an Area Service Board (ASB) to realize further cost savings and efficiencies by reducing the number of single-purpose bodies. ASBs would deliver services in six core areas: social assistance, child care, social housing, land ambulance, public health and homes for the aged. Northern communities organized as an ASB would have the option to deliver additional services including policing, waste management, economic

development, airports, roads and bridges, emergency preparedness, land use planning, and the administration of portions of the Provincial Offences Act.

Municipal Roles and Responsibilities

The *Municipal Act, 2001* grants municipalities broad authority to deliver services and operate facilities in ten spheres of jurisdiction. The spheres of jurisdiction replaced many specific provisions of the “old” *Municipal Act* and are intended to avoid the need for enabling legislation when new issues arise. The spheres of jurisdiction are:

- Highways.
- Transportation systems other than highways, including transit, ferries and airports.
- Waste management.
- Public utilities, including water supply and sewage treatment.
- Culture, parks, recreation and heritage.
- Drainage and flood control, excluding storm sewers, floodways.
- Structures, including signs and fences.
- Parking.
- Animals.
- Economic development services.

Other Acts also authorize municipal powers, including the *Planning Act* and the *Building Code Act, Fire Protection and Prevention Act, Police Services Act, Ontario Works Act* and *Social Housing Reform Act, 2000*.

Not all municipalities provide all services. In a two-tier system of municipal government, services may be assigned by legislation to upper-tiers or to lower-tiers. In some cases, responsibility may be shared by both levels of government. As an example, local municipalities are often responsible for collecting garbage, while the upper-tier is responsible for garbage disposal and broader waste management issues.

Certain responsibilities specified in the *Municipal Act, 2001* may be transferred from one level of government to another. The upper-tier council and a majority of lower-tier councils must vote in favour of the transfer. Also, the number of electors in the lower-tiers supporting the transfer must represent a majority of electors in the county or region.

Local Boards

There are many local boards involved in the provision of local services. These include health units, transit commissions, children's aid societies, and planning boards. Legislation administered by different ministries authorizes the establishment of local boards. For example, the *Health Protection and Promotion Act* administered by the Ministry of Health and Long Term Care provides for boards of health, and the *Public Libraries Act* administered by the Ministry of Citizenship governs public library boards.

The *Municipal Act, 2001* enables municipalities to establish a new type of board—the municipal service board. Municipal service boards may be created in five spheres of jurisdiction:

- Public utilities.
- Waste management.
- Transportation systems other than highways.
- Culture, parks, recreation and heritage.
- Parking, except on highways.

Members of municipal service boards are appointed by council, giving council significant control over the entity.

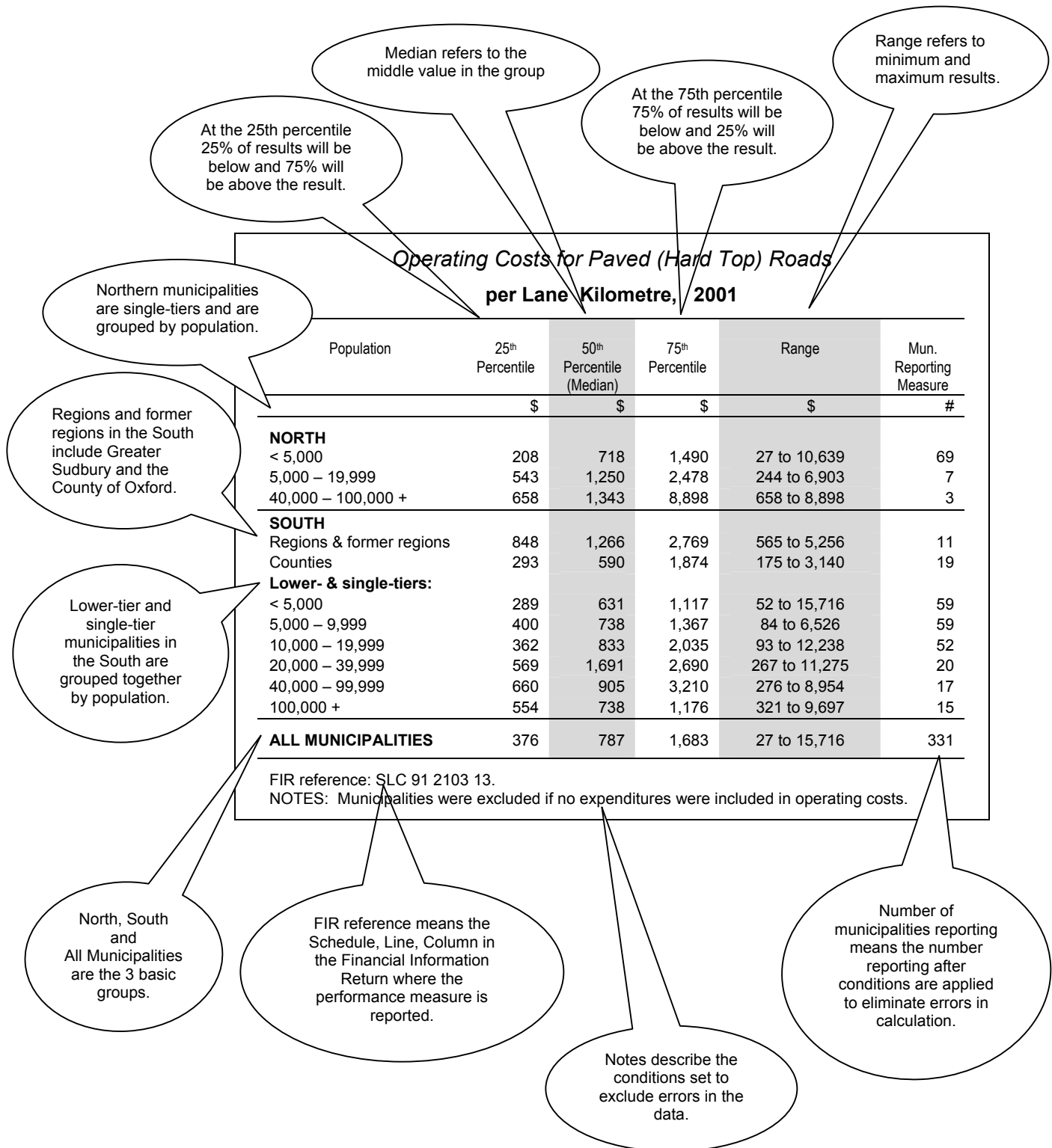
Some local boards, such as police service boards, are mandatory. Others, such as library boards, are optional and established at the discretion of council. Local boards also vary in the degree of independence from council. If council appoints some or all members of the board or has the right to approve funding, it may be able to exert considerable control. Mandatory boards are often beyond the effective control of council and make decisions and determine revenue requirements independently, or in compliance with existing standards or provincial legislation.

Consolidating Financial Activities of the Local Board

If a local board serves only one municipality, its financial transactions are fully consolidated in the Financial Information Return of the municipality. If one or more municipalities establish a joint local board, each municipality consolidates the board's financial transactions on a proportional basis in its Financial Information Return.

Part II: Summary of 2001 Results

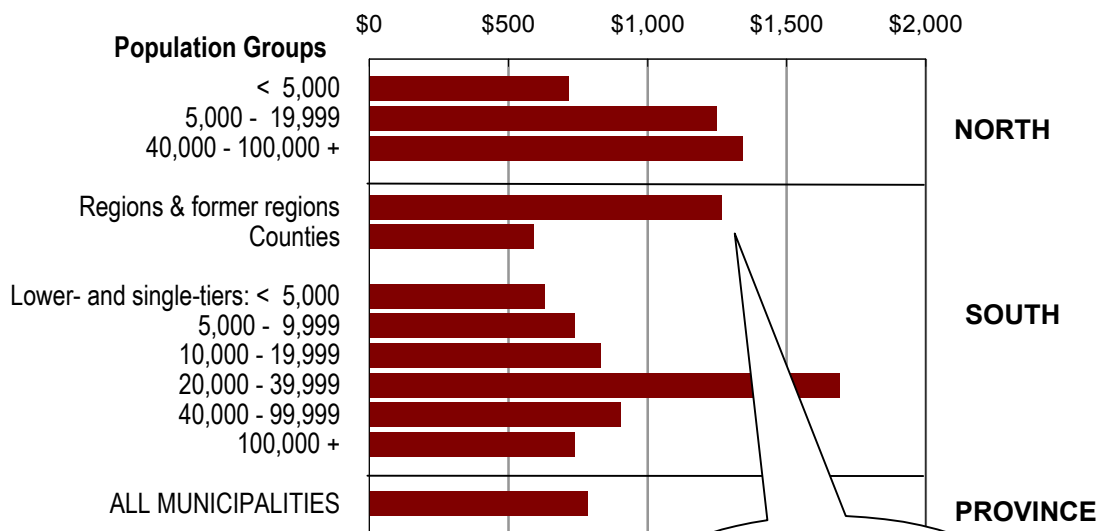
How To Read a Table of Results



How To Read a Graph

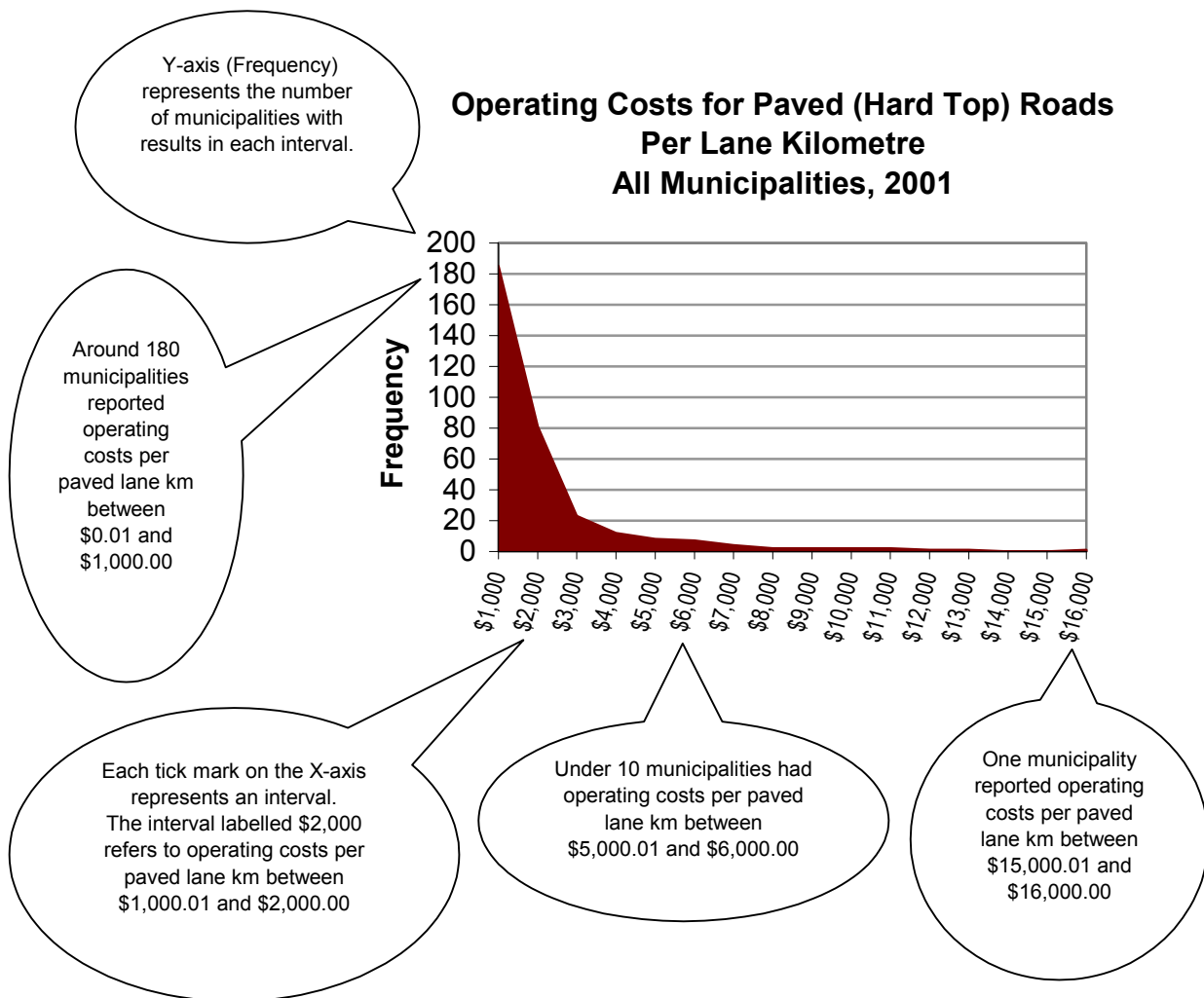
Operating Costs for Paved (Hard Top) Roads per Lane Kilometre 2001 (Median)

The median is
graphed for
every group.



The median result for the
regions and former regions
group was \$1,265 per
paved lane km.

How To Read the Graph of a Frequency Distribution



General Government: Efficiency

General government support as a percentage of total municipal operating costs.

$$\frac{\text{Operating costs for general government support}}{\text{Total municipal operating costs}} \times 100$$

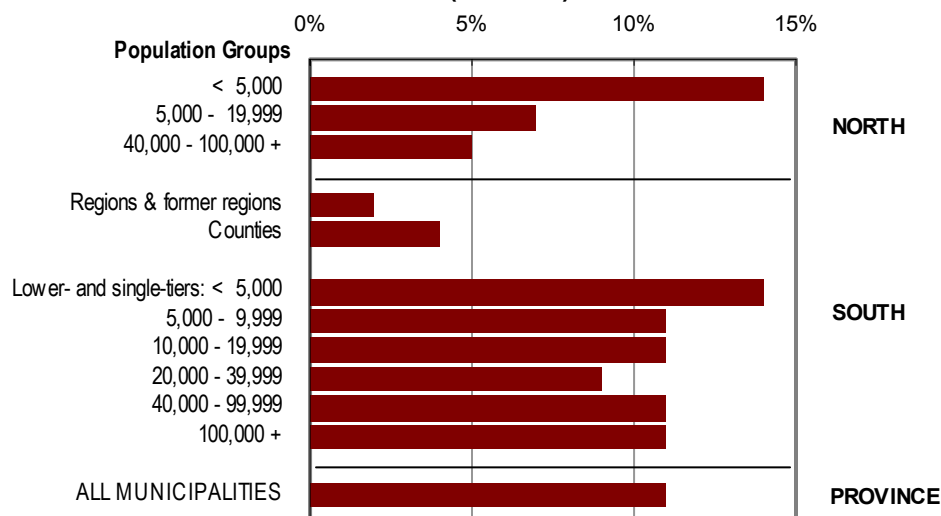
**General Government Support as a Percentage
of Total Municipal Operating Costs
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	%	%	%	%	#
NORTH					
< 5,000	10%	14%	19%	6% to 31%	109
5,000 – 19,999	6%	7%	10%	4% to 12%	12
40,000 – 100,000 +		5%		5%	1
SOUTH					
Regions & former regions	2%	2%	6%	2% to 6%	3
Counties	3%	4%	6%	1% to 8%	20
Lower- & single-tiers:					
< 5,000	11%	14%	17%	7% to 39%	66
5,000 – 9,999	9%	11%	14%	6% to 27%	65
10,000 – 19,999	9%	11%	13%	3% to 21%	60
20,000 – 39,999	9%	9%	11%	6% to 15%	17
40,000 – 99,999	7%	11%	11%	4% to 19%	9
100,000 +	9%	11%	13%	7% to 14%	10
ALL MUNICIPALITIES	9%	11%	15%	1% to 39%	372

FIR reference: SLC 91 0202 13.

NOTES: Excludes municipalities that did not report payments to the Municipal Property Assessment Corporation on the line for general government support in Schedule 40 of the FIR.

**General Government Support as a Percentage
of Total Municipal Operating Costs
2001 (Median)**



General Government: Efficiency

Governance and corporate management as a percentage of total municipal operating costs.

Operating costs for governance and corporate management

Total municipal operating costs

X 100

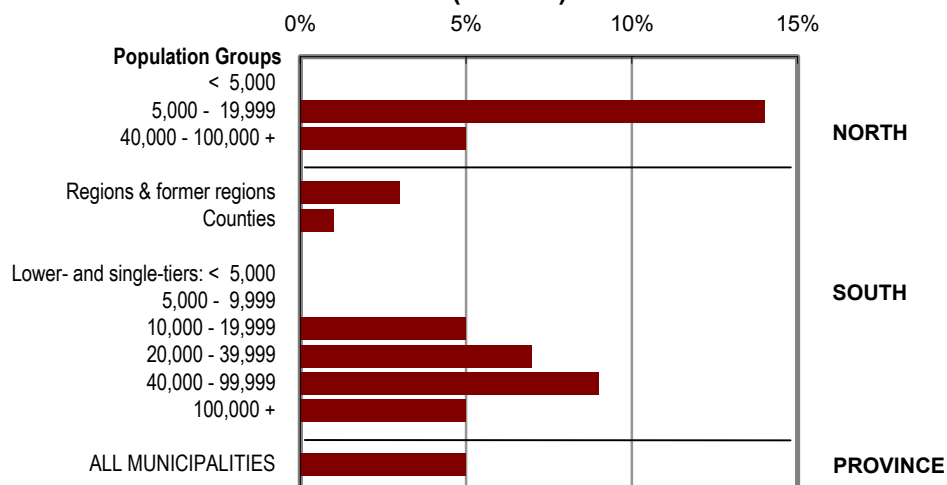
**Governance and Corporate Management as a Percentage
of Total Municipal Operating Costs
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	%	%	%	%	#
NORTH					
< 5,000					0
5,000 – 19,999		14%		14%	1
40,000 – 100,000 +		5%	5%	5%	2
SOUTH					
Regions & former regions	2%	3%	4%	1% to 5%	7
Counties		1%		1%	1
Lower- & single-tiers:					
< 5,000					0
5,000 – 9,999					0
10,000 – 19,999		5%		5%	1
20,000 – 39,999	6%	7%	8%	6% to 13%	4
40,000 – 99,999	6%	9%	11%	3% to 12%	6
100,000 +	4%	5%	5%	3% to 7%	5
ALL MUNICIPALITIES	3%	5%	8%	1% to 14%	27

FIR reference: SLC 91 0203 13.

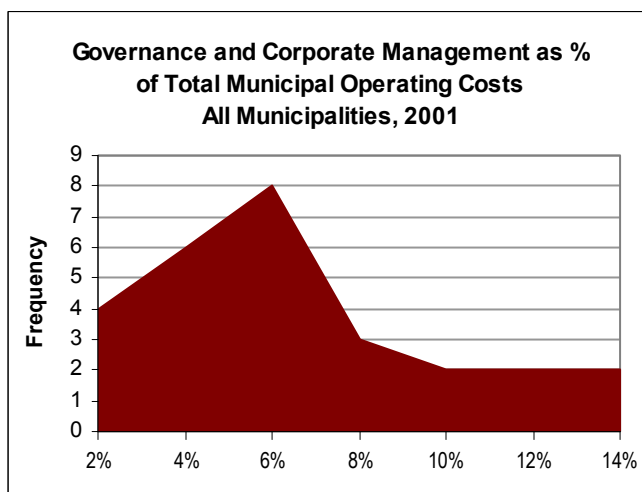
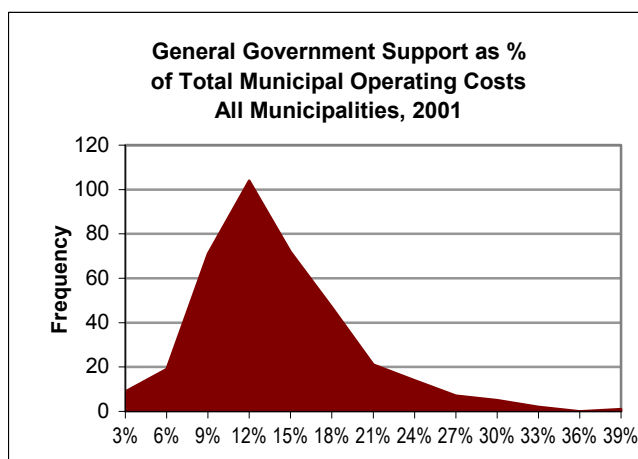
NOTES: Excludes municipalities that did not report payments to the Municipal Property Assessment Corporation on the line for corporate management in Schedule 40 of the FIR.

**Governance and Corporate Management as a Percentage
of Total Municipal Operating Costs
2001 (Median)**



General Government: Efficiency

General government support as a percentage of total municipal operating costs.
Governance and corporate management as a percentage of total municipal operating costs.

**Objective**

Efficient municipal government.

Notes

Since the general government measures are expressed as percentages, the proportion of total municipal operating costs spent on general government is measured rather than costs per unit.

New categories of general government costs were introduced in 2001. Clarifying general government categories was an essential step in standardizing how general government costs are allocated to other service areas. To ease the transition to the new categories, municipalities could use either the new general government categories or the categories used in 2000.

General government categories for 2000:

- Members of council.
- General government support.
- Corporate overhead.

Revised general government categories introduced in 2001:

- Governance.
- Corporate management.
- Program support.

As of 2002 all municipalities use the categories which include corporate management.

A municipality reports only one efficiency measure for general government. The efficiency measure reported depends on the general government categories used in the Financial Information Return. Municipalities using the categories which include general government support report the measure: general government support as a percentage of total municipal operating costs. Municipalities using the categories which include corporate management report the measure: governance and corporate management as a percentage of total municipal operating costs.

The two measures should not be considered comparable since what is measured differs. For example, the cost of council is included in the measure based on governance and corporate management, but it is not included in the measure based on general government support. Also, the amount of general government allocated to other services differs depending on which set of general government categories is used.

If a municipality reported payments to the Municipal Property Assessment Corporation (MPAC), but did not report them on the appropriate line in Schedule 40 of the Financial Information Return, the municipality was not included in the Summary. Operating costs for the general government measures are adjusted to net out MPAC payments. If MPAC payments are reported on another line, the general government measure will be understated.

For municipalities reporting general government support as a percentage of total municipal operating costs, MPAC payments should be reported as contracted services for general government support in Schedule 40, Revenue Fund Expenditures. For municipalities reporting governance and corporate management as a percentage of total municipal operating costs, MPAC payments should be reported as contracted services on the line for corporate management in Schedule 40.

If a municipality includes tax write-offs in operating costs for general government, the measure will be higher than if tax write-offs were reported on the schedule for Continuity of Taxes Receivable, Schedule 72. This occurs because tax write-offs reported in the continuity schedule are not included in operating costs.

Both general government measures net out payments made by municipalities in the Greater Toronto Area for the equalization of social assistance and social housing.

**Factors
affecting
results**

Results are influenced by:

- General government categories used and corresponding measure reported.
- Whether general government costs are allocated to other service areas.
- Allocation method.
- Full-time vs. part-time councillors.
- Responsibility for Provincial Offences Act administration.
- Inclusion of tax write-offs in operating costs for general government support or corporate management.

Fire Services: Efficiency

Operating costs for fire services per \$1,000 of property assessment.

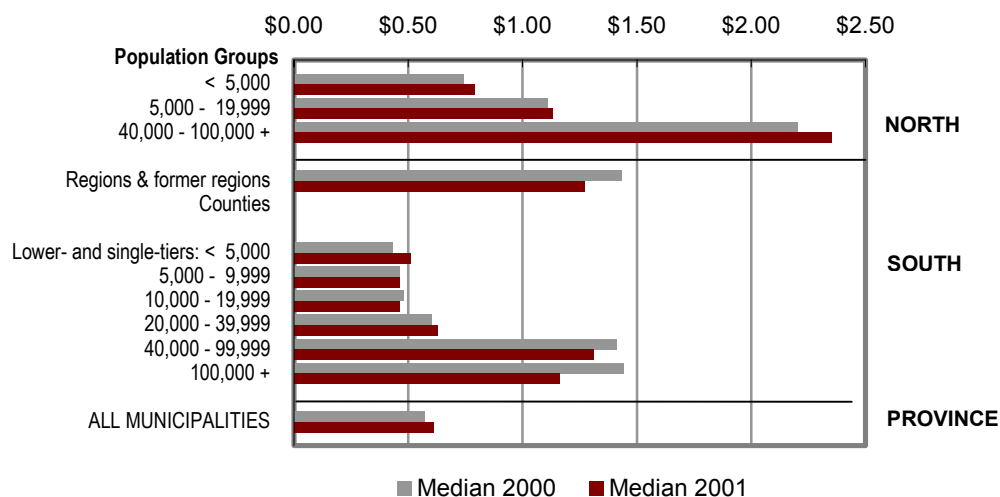
Operating costs for fire services
Total property assessment / 1,000

**Operating Costs for Fire Services per \$1,000 of Property Assessment
2000 and 2001**

Population	Median 2000	Median 2001	Range 2000	Range 2001	Mun. Reporting Measure 2000	Mun. Reporting Measure 2001
	\$	\$	\$	\$	#	#
NORTH						
< 5,000	0.74	0.79	0.01 to 3.21	0.06 to 4.63	135	110
5,000 – 19,999	1.11	1.13	0.49 to 3.23	0.45 to 3.36	13	13
40,000 – 100,000 +	2.20	2.35	1.59 to 15.94	1.91 to 2.39	4	3
SOUTH						
Regions & former regions	1.43	1.27	1.43	0.71 to 1.33	1	4
Counties					0	0
Lower- & single-tiers:						
< 5,000	0.43	0.51	-1.32 to 2.84	-0.54 to 2.91	160	65
5,000 – 9,999	0.46	0.46	0.19 to 2.06	0.16 to 2.45	70	65
10,000 – 19,999	0.48	0.46	0.23 to 2.27	0.24 to 2.52	67	62
20,000 – 39,999	0.60	0.63	0.35 to 2.29	0.33 to 2.30	27	21
40,000 – 99,999	1.41	1.31	0.55 to 2.21	0.53 to 2.81	23	17
100,000 +	1.44	1.16	0.72 to 2.27	0.69 to 2.20	17	15
ALL MUNICIPALITIES	0.57	0.61	-1.32 to 15.94	-0.54 to 4.63	517	374

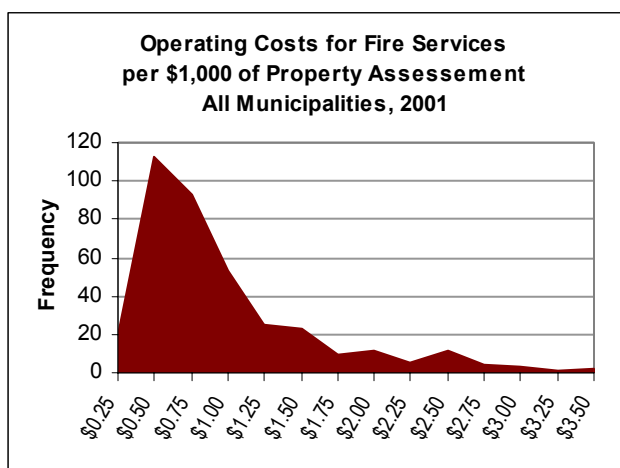
FIR reference: SLC 91 1101 13. Condition: SLC 91 1101 13 is not equal to zero.

NOTES: The County reporting this measure as a shared responsibility is not included because it is not representative. All other municipalities reporting the measure are included in the Summary. In the regions and former regions group, the municipalities reporting this measure are former regions which have been become single-tier municipalities. The reduction in the total number of municipalities reporting in 2001 reflects amalgamations. There were 571 municipalities in 2000 and 448 in 2001 after amalgamations.

**Operating Costs for Fire Services per \$1,000 of Property Assessment
2000 and 2001 (Median)**


Fire Services: Efficiency

Operating costs for fire services per 1,000 of property assessment.

**Objective**

Efficient fire services.

Notes

Fire service is generally the responsibility of single-tier municipalities and local municipalities in a two-tier system.

The denominator is based on market value assessment and varies from municipality to municipality. Total assessment for a municipality will reflect regional values, the mix of residential, commercial and industrial properties and the urban/rural characteristics of the municipality. Low total assessment can make the result disproportionately high while high assessment can make the result appear low.

A municipality will have a negative value for the efficiency measure if operating costs in the numerator are less than revenue received from other municipalities for the provision of fire services.

**Factors
affecting
results**

Results are influenced by:

- Total assessment.
- The composition of the fire fighting force: salaried, volunteer, combination.
- Salary schedules.
- Urban and rural mix.
- Density.
- Size of municipality and service area.
- Joint service provisions.
- High cost for standby services.

- Number of call outs.
- Age of equipment and vehicles.
- Water infrastructure (hydrants).
- Service level decisions made by local councils on response time and other programs. Fire departments offer a wide variety of services which include fire suppression, fire prevention, public education programs, medical emergencies and medical and disaster relief. Other municipalities offer specialized services such as rescue services on highways.

Police Services: Efficiency

Operating costs for police services per household.

Operating costs for police services

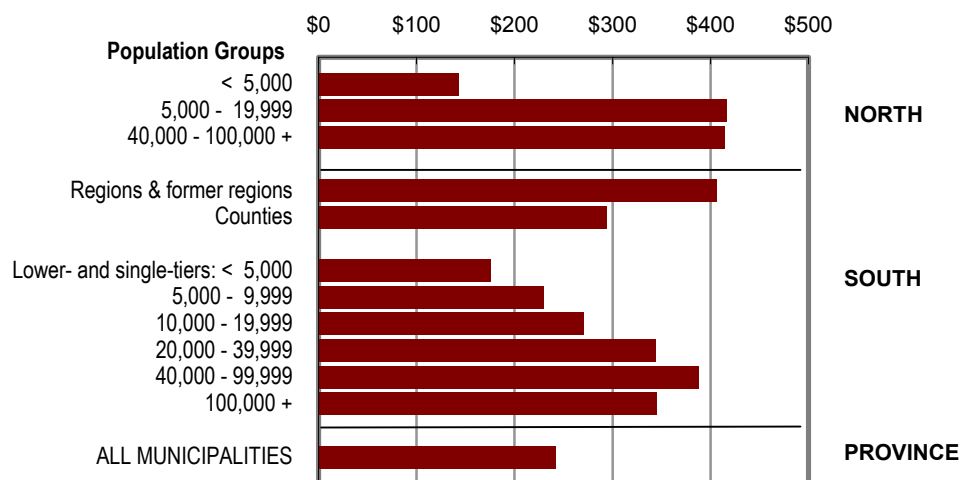
Total households

**Operating Costs for Police Services per Household
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	90	143	302	11 to 2,056	104
5,000 – 19,999	331	417	497	236 to 768	13
40,000 – 100,000 +	393	415	416	393 to 416	3
SOUTH					
Regions & former regions	379	407	476	156 to 676	11
Counties		294	299	294 to 299	2
Lower- & single-tiers:					
< 5,000	136	176	263	58 to 796	64
5,000 – 9,999	163	230	304	88 to 519	56
10,000 – 19,999	219	271	360	147 to 530	40
20,000 – 39,999	317	344	404	208 to 474	15
40,000 – 99,999	355	388	447	107 to 470	8
100,000 +	310	345	366	310 to 607	4
ALL MUNICIPALITIES	138	242	366	11 to 2,056	320

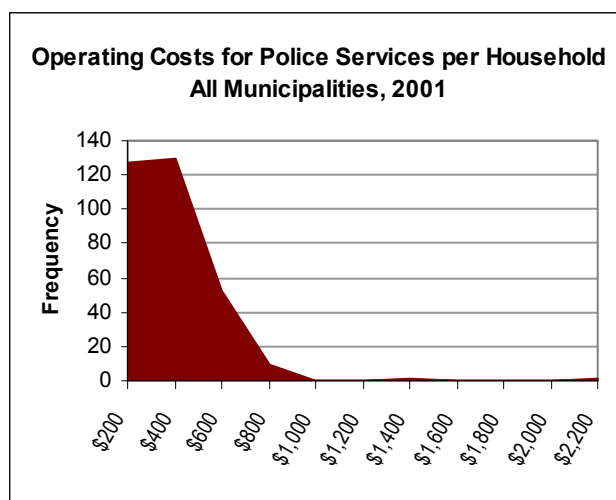
FIR reference: SLC 91 1202 13.

NOTES: If a county or region is responsible for police services, results for local area municipalities are not included.

**Operating Costs for Police Services per Household
2001 (Median)**

Police Services: Efficiency

Operating costs for police services per household.

**Objective**

Efficient police services.

Notes

Only one efficiency measure is calculated for the municipality, even if service is provided by two or more police forces. (Some amalgamated municipalities have separate contracts for areas which were separate municipalities before the amalgamation.)

If a county or region is responsible for police services, results for local area municipalities are not included in the summary. This is because residual costs reported by local area municipalities are automatically calculated as an efficiency measure regardless of whether a municipality is responsible for a service.

Factors affecting results

Results are influenced by:

- Service area and population.
- Range of services, e.g. patrol, investigations, community relations, crime prevention, specialized activities such as tactical response and forensic investigation.
- Joint police service agreements.
- Facilities, maintenance and fleet costs.
- Labour costs.
- Urban/rural mix.
- Proximity and quantity of higher risk facilities: half-way houses, correctional facilities, mental health facilities.
- Composition of police force (e.g., uniform and civilian).
- Unique geographical considerations (e.g., policing major bodies of water).

- One-time special events such as the arrival of a world leader.
- Infrequent events (natural or manmade disasters).
- Higher incidents of more complex crimes which require additional resources, such as homicides.

Police Services: Effectiveness

Violent crime rate per 1,000 persons.

Total number of actual incidents of violent crime,
including incidents involving youths

Population / 1,000

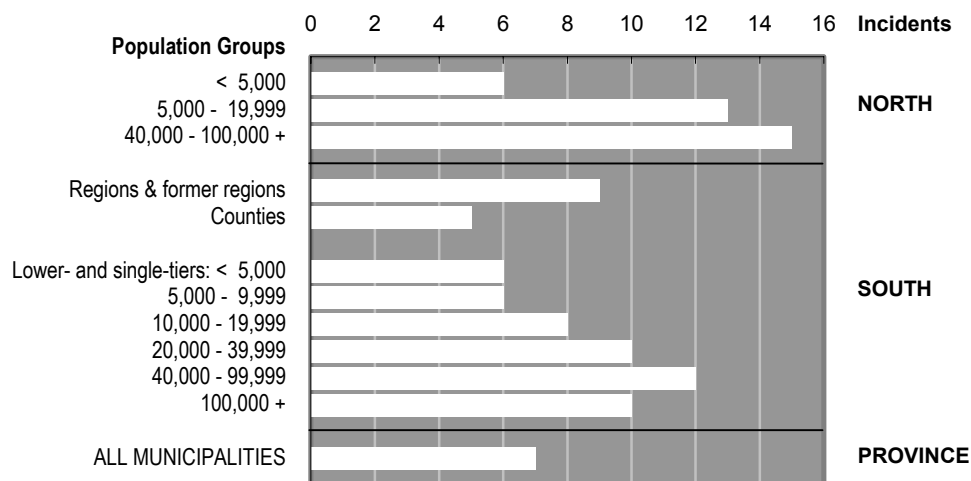
**Violent Crime Rate per 1,000 Persons
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	4	6	12	0 to 133	81
5,000 – 19,999	11	13	21	2 to 31	11
40,000 – 100,000 +	10	15	16	10 to 16	3
SOUTH					
Regions & former regions	6	9	10	5 to 14	10
Counties		5	6	5 to 6	2
Lower- & single-tiers:					
< 5,000	4	6	10	0 to 29	59
5,000 – 9,999	4	6	11	0.3 to 36	52
10,000 – 19,999	6	8	11	3 to 28	39
20,000 – 39,999	7	10	13	3 to 55	15
40,000 – 99,999	10	12	13	2 to 17	8
100,000 +	8	10	12	8 to 12	4
ALL MUNICIPALITIES	5	7	12	0 to 133	284

FIR reference: SLC 92 1258 07.

Condition: Number of actual incidents for total crimes in SLC 92 1261 05 is greater than 0.

NOTES: Crime rate recast for municipalities with populations over 100,000.

**Violent Crime Rate per 1,000 Persons
2001 (Median)**

Police Services: Effectiveness

Property crime rate per 1,000 persons.

Total number of actual incidents of property crime,
including incidents involving youths

Population / 1,000

**Property Crime Rate per 1,000 Persons
2001**

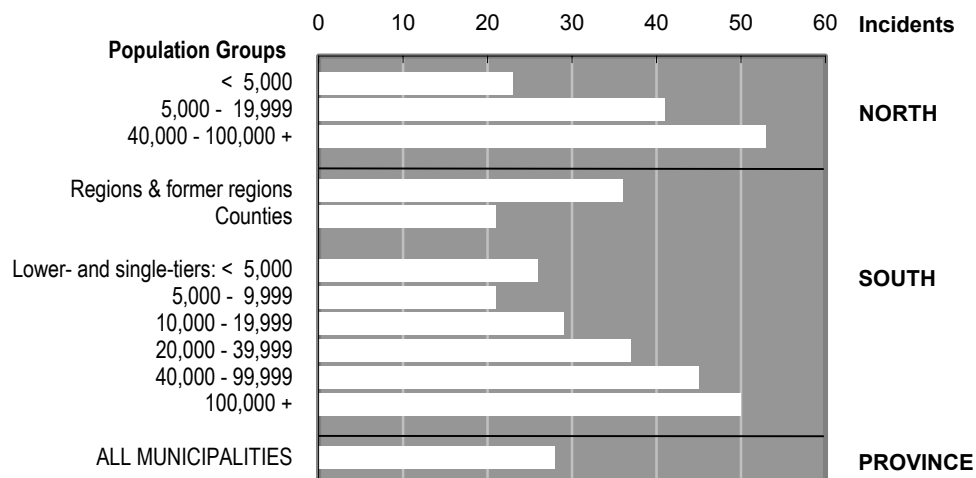
Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	11	23	44	0 to 125	84
5,000 – 19,999	27	41	55	9 to 97	11
40,000 – 100,000 +	37	53	53	37 to 53	3
SOUTH					
Regions & former regions	27	36	42	23 to 49	10
Counties		21	21	21	2
Lower- & single-tiers:					
< 5,000	18	26	44	4 to 128	59
5,000 – 9,999	18	21	33	8 to 93	52
10,000 – 19,999	23	29	42	2 to 63	39
20,000 – 39,999	29	37	50	16 to 66	15
40,000 – 99,999	41	45	53	37 to 87	8
100,000 +	47	50	51	47 to 59	4
ALL MUNICIPALITIES	18	28	44	0 to 128	287

FIR reference: SLC 92 1259 07.

Condition: Number of actual incidents for total crimes in SLC 92 1261 05 is greater than 0.

NOTES: Crime rate recast for municipalities with populations over 100,000.

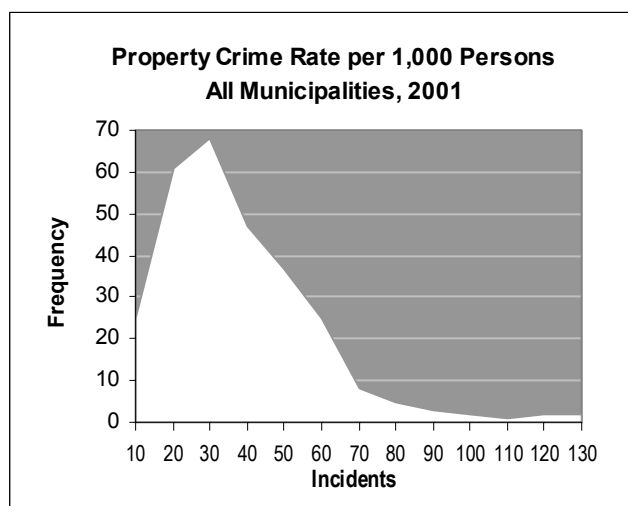
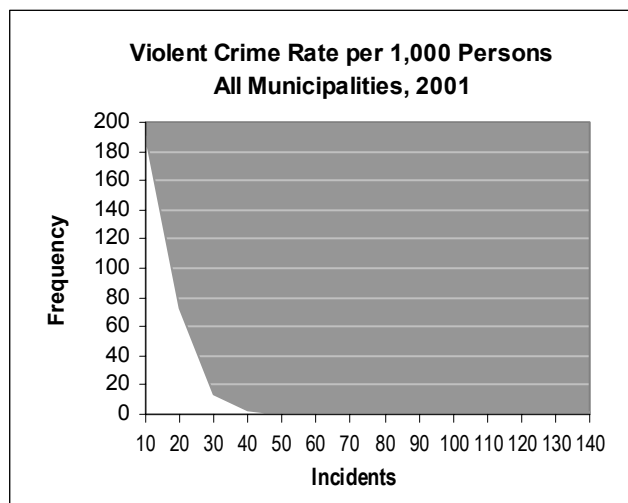
**Property Crime Rate per 1,000 Persons
2001 (Median)**



Police Services: Effectiveness

Violent crime rate per 1,000 persons.

Property crime rate per 1,000 persons.

**Objective**

Safe Communities.

Notes

Definitions of violent crime and property crime categories are the same as those used by Statistics Canada.

Municipalities with populations over 100,000 reported the crime rate per 100,000 persons. To standardize reporting in the 2001 summary report, the measures were recast as the violent crime rate per 1,000 persons and the property crime rate per 1,000 persons. From 2002 onwards, crime rates for all municipalities are reported per 1,000 persons.

The Summary report does not include the total crime rate or youth crime because of definitional issues. These measures were clarified for the 2002 reporting year.

**Factors
affecting
results**

Crime rates are influenced by:

- Demographics.
- Population density.
- Urban and rural mix.
- Business and residential mix.
- Local economic cycles.
- Existence of transient populations.
- Political priorities and specific, targeted policing initiatives.
- Preventive and educational programs.
- Community involvement and partnerships.

Paved Roads: Efficiency

Operating costs for paved (hard top) roads per lane kilometre.

Operating costs for paved (hard top) roads

Total paved lane kilometres

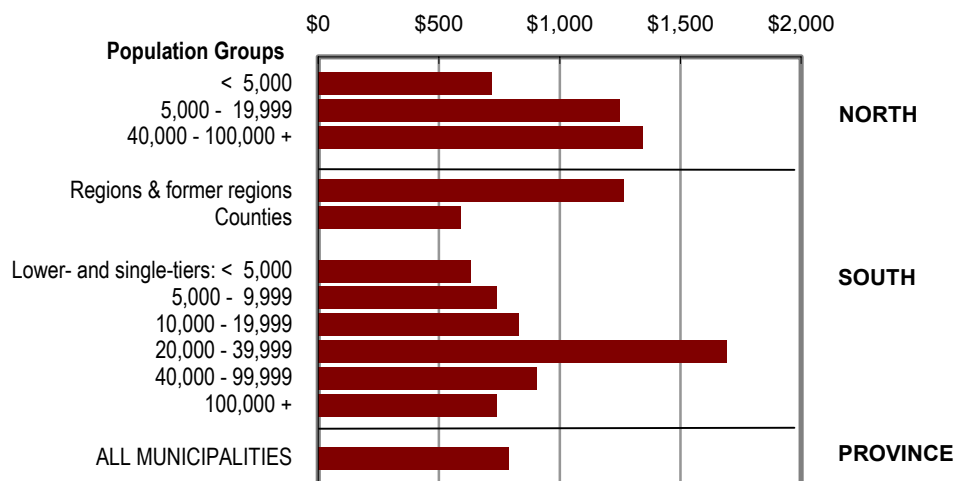
**Operating Costs for Paved (Hard Top) Roads
per Lane Kilometre
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	208	718	1,490	27 to 10,639	69
5,000 – 19,999	543	1,250	2,478	244 to 6,903	7
40,000 – 100,000 +	658	1,343	8,898	658 to 8,898	3
SOUTH					
Regions & former regions	848	1,266	2,769	565 to 5,256	11
Counties	293	590	1,874	175 to 3,140	19
Lower- & single-tiers:					
< 5,000	289	631	1,117	52 to 15,716	59
5,000 – 9,999	400	738	1,367	84 to 6,526	59
10,000 – 19,999	362	833	2,035	93 to 12,238	52
20,000 – 39,999	569	1,691	2,690	267 to 11,275	20
40,000 – 99,999	660	905	3,210	276 to 8,954	17
100,000 +	554	738	1,176	321 to 9,697	15
ALL MUNICIPALITIES	376	787	1,683	27 to 15,716	331

FIR reference: SLC 91 2103 13.

NOTES: Municipalities were excluded if no expenditures were included in operating costs.

**Operating Costs for Paved (Hard Top) Roads
per Lane Kilometre
2001 (Median)**



Unpaved Roads: Efficiency

Operating costs for unpaved (loose top) roads per lane kilometre.

$$\frac{\text{Operating costs for unpaved (loose top) roads}}{\text{Total unpaved lane kilometres}}$$

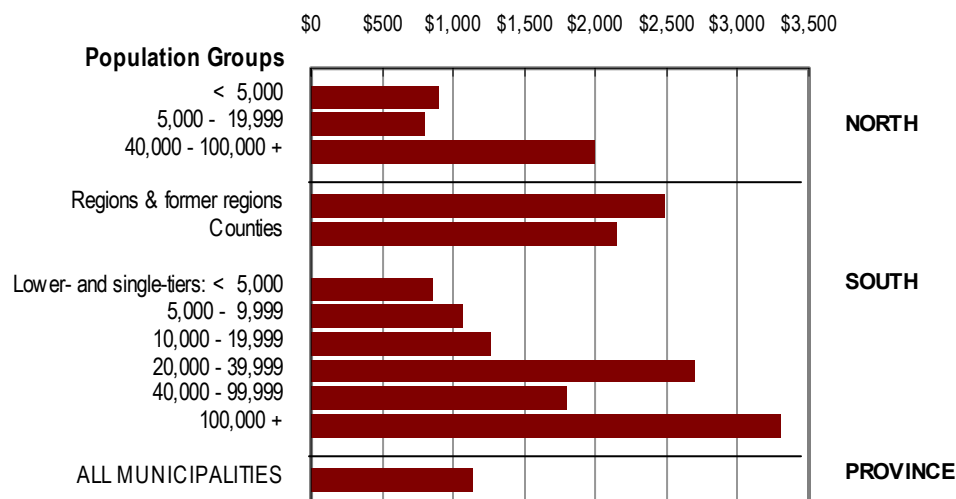
**Operating Costs for Unpaved (Loose Top) Roads
per Lane Kilometre
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	580	896	1,505	62 to 8,865	78
5,000 – 19,999	576	801	1,137	466 to 1,729	6
40,000 – 100,000 +	1,792	1,994	4,155	1,792 to 4,155	3
SOUTH					
Regions & former regions	1,907	2,481	2,884	804 to 5,123	5
Counties	1,453	2,157	3,140	493 to 4,073	9
Lower- & single-tiers:					
< 5,000	572	863	1,269	70 to 6,445	54
5,000 – 9,999	661	1,067	1,641	227 to 6,960	52
10,000 – 19,999	737	1,269	1,973	235 to 7,635	43
20,000 – 39,999	1,398	2,697	3,671	623 to 11,284	16
40,000 – 99,999	1,142	1,796	3,819	508 to 8,948	12
100,000 +	1,424	3,306	4,228	239 to 6,544	9
ALL MUNICIPALITIES	711	1,139	1,904	62 to 11,284	287

FIR reference: SLC 91 2104 13.

All municipalities reporting the measure are included in the Summary.

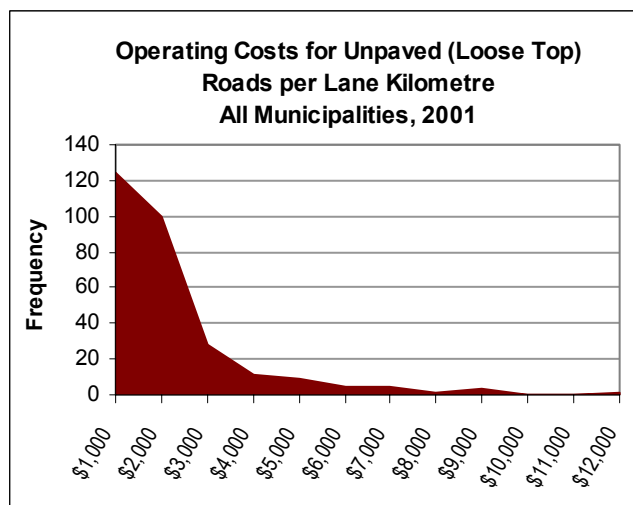
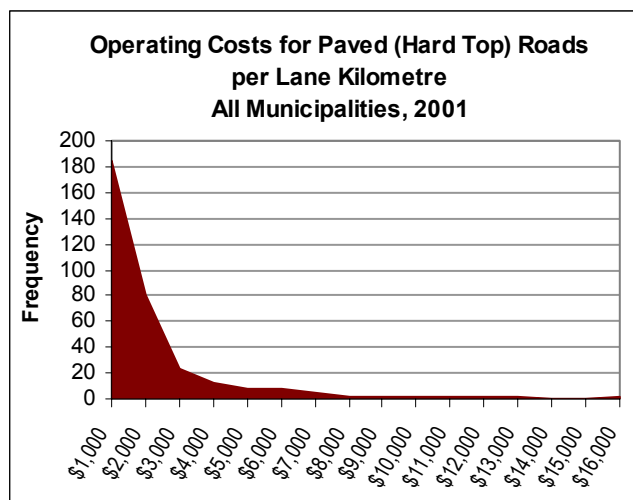
**Operating Costs for Unpaved (Loose Top) Roads
per Lane Kilometre
2001 (Median)**



Roadways: Efficiency

Operating costs for paved (hard top) roads per lane kilometre.

Operating costs for unpaved (loose top) roads per lane kilometre.

**Objective**

Efficient maintenance of paved and unpaved roads.

Some regional municipalities reported road maintenance objectives as:

- Eliminate hazards to vehicular traffic.
- Protect the investment in road surface.
- Provide a smooth and safe riding surface.
- Safely accommodate emergency stopping of vehicles.
- Prevent accumulation of water on travelled portion of roadway, thereby preventing and reducing surface defects.

Notes

This measure does not include capital costs.

**Factors
affecting
results**

Results are influenced by:

- Financial reporting practices.
- Inclusion of indirect roadways costs such as supervision, technical support, building/stock maintenance, training, utilities, etc.
- Climate, including frequency of freezes and thaws.
- Age and condition of road network.
- Age of equipment.
- Road types, such as arterial and non-arterial roads.
- Width of lanes.
- Traffic volume and type of traffic.
- Proportion of heavy trucks in the traffic stream.
- Urban and rural mix.
- Density.
- Size of municipality.
- Service level decisions made by local council.
- Maintenance standards.
- Presence of proactive preventative maintenance program.
- Inclusion of sidewalks, walkways, alleys.

Adequacy of Roads: Effectiveness

Percentage of paved lane kilometres where the condition is rated as good to very good.

Number of paved lane kilometres rates as good to very good

Total number of paved lane kilometres tested

X 100

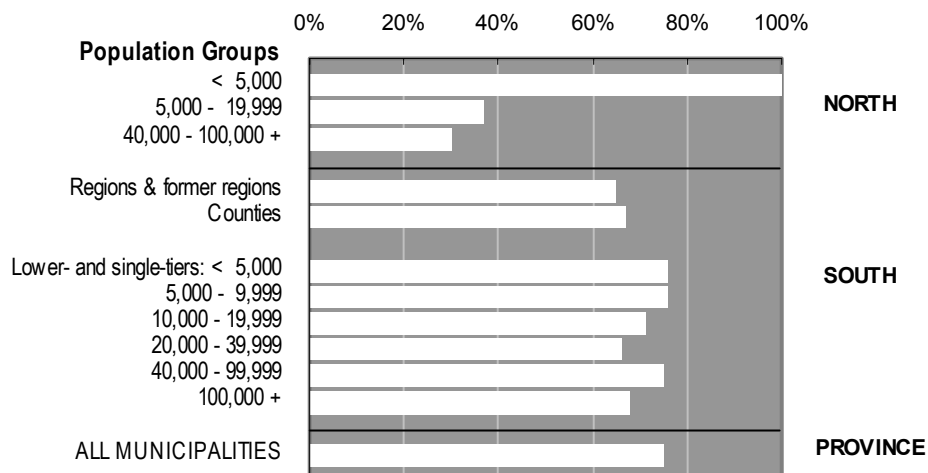
Percentage of Paved Lane Kilometres where the Condition is Rated as Good to Very Good, 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. reporting measure
	%	%	%	%	#
NORTH					
< 5,000	73%	100%	100%	18% to 100%	54
5,000 – 19,999	29%	37%	75%	20% to 88%	7
40,000 – 100,000 +	30%	30%	100%	30% to 100%	2
SOUTH					
Regions & former regions	37%	65%	77%	19% to 84%	11
Counties	51%	67%	78%	36% to 100%	17
Lower- & single-tiers:					
< 5,000	55%	76%	97%	5% to 100%	46
5,000 – 9,999	58%	76%	100%	3% to 100%	48
10,000 – 19,999	52%	71%	87%	8% to 100%	44
20,000 – 39,999	54%	66%	82%	35% to 91%	14
40,000 – 99,999	61%	75%	82%	40% to 100%	11
100,000 +	48%	68%	84%	35% to 100%	14
ALL MUNICIPALITIES	55%	75%	99%	3% to 100%	268

FIR reference: SLC 92 2152 07. Condition: result is greater than 0.

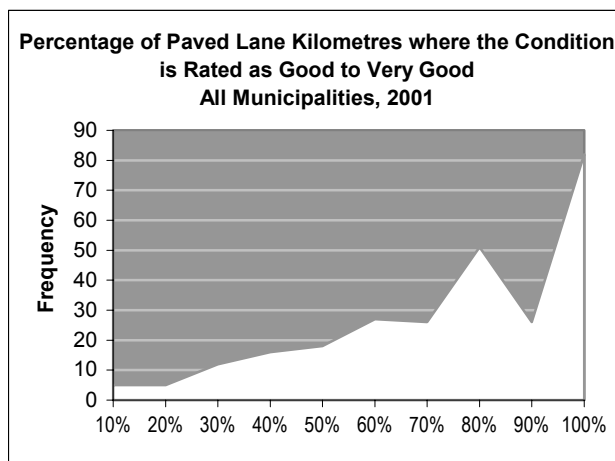
NOTES: Municipalities were excluded if the number of lane kilometres exceeded the number of lane kilometres in the municipal road system in SLC 94 2202 02.

Percentage of Paved Lane Kilometres where the Condition is Rated as Good to Very Good, 2001 (Median)



Adequacy of Roads: Effectiveness

Percentage of paved lane kilometres where the condition is rated as good to very good.



Objective

Provide a paved road system that has a pavement condition that meets municipal objectives.

Notes

The ministry recommends that municipalities test the pavement condition using one of two established methods:

- Pavement Condition Index (PCI).
- Ministry of Transportation's Roads Inventory Management System (RIMS).

Factors affecting results

Results are influenced by:

- Whether a sample or all lane kilometres are tested.
- Method of testing lane kilometres, i.e. an estimate or use of a formal rated system based on PCI or RIMS.

Roadways — Winter Control: Efficiency

Operating costs for winter control maintenance of roadways per lane kilometre.

Operating costs for winter control maintenance of roadways

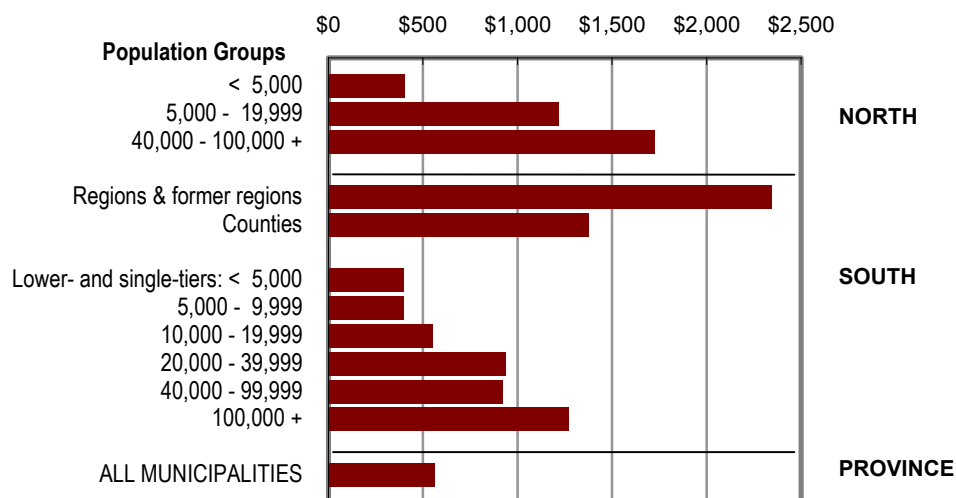
Total lane kilometres maintained in winter

**Operating Costs for Winter Control Maintenance of Roadways
per Lane Kilometre, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure #
	\$	\$	\$	\$	
NORTH					
< 5,000	263	402	907	25 to 3,098	94
5,000 – 19,999	439	1,217	2,003	250 to 2,909	12
40,000 – 100,000 +	1,409	1,725	3,459	1,409 to 3,459	3
SOUTH					
Regions & former regions	1,756	2,347	3,691	1,286 to 4,189	11
Counties	1,077	1,380	1,639	769 to 2,509	19
Lower- & single-tiers:					
< 5,000	248	398	615	81 to 3,916	63
5,000 – 9,999	264	399	718	38 to 2,554	60
10,000 – 19,999	354	553	761	85 to 2,374	57
20,000 – 39,999	615	941	1,240	88 to 2,371	20
40,000 – 99,999	735	921	1,615	530 to 2,597	17
100,000 +	881	1,273	1,565	330 to 2,815	15
ALL MUNICIPALITIES	326	565	1,157	25 to 4,189	371

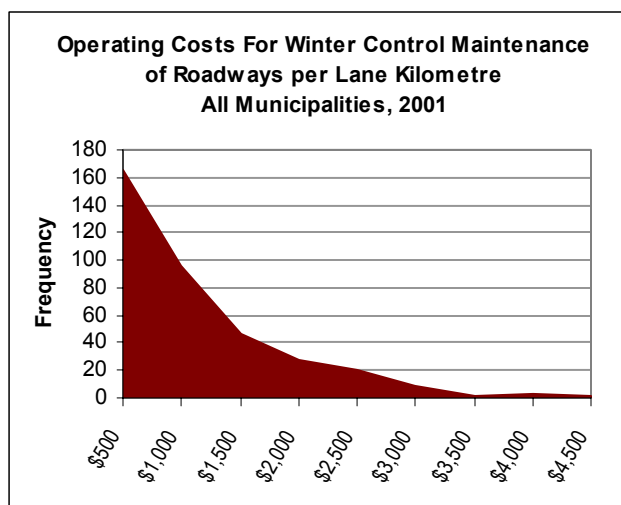
FIR reference: SLC 91 2202 13.

All municipalities reporting the measure are included in the Summary.

**Operating Costs for Winter Control Maintenance of Roadways
per Lane Kilometre
2001 (Median)**

Roadways — Winter Control: Efficiency

Operating costs for winter control maintenance of roadways per lane kilometre.

**Objective**

Efficient winter control maintenance of roadways.

Notes

Some municipalities have historically reported winter control as part of roadways when reporting to the province. This may make it more difficult to identify winter maintenance costs used in performance measures. In some cases winter maintenance costs may be understated, particularly where a municipality reports costs for materials only and does not include a salary component.

The 2001 winter control efficiency measure includes clearing sidewalks, parking lots and driveways for seniors and disabled persons, where these services are offered. Since not all municipalities provide these services, operating costs may be higher for municipalities which provide these services.

**Factors
affecting
results**

Results are influenced by:

- Financial reporting practices.
- Average snowfall and frequency and severity of winter storm events.
- Number and extent of areas prone to drifting.
- Road types, such as arterial and non-arterial roads.
- Urban and rural mix.
- Density.
- Traffic volume.
- Size of municipality and service area.
- Service level decisions made by local council.

- Maintenance standards.
- Cost of standby services.
- Winter preparedness.
- Age of equipment and vehicles.
- Competitive market conditions.

Service levels decisions include the threshold for responding to a winter storm event and the service standard for road conditions after a storm event. For example, ploughs depart when the snow accumulation is x centimetres and the standard is bare pavement.

Competitive market conditions influence the cost structure of services provided by the private and public sectors.

Roadways — Winter Control: Effectiveness

Percentage of winter event responses that met or exceeded municipal road maintenance standards.

$$\frac{\text{Number of winter event responses that met or exceeded municipal road maintenance standards}}{\text{Total number of winter event responses}}$$

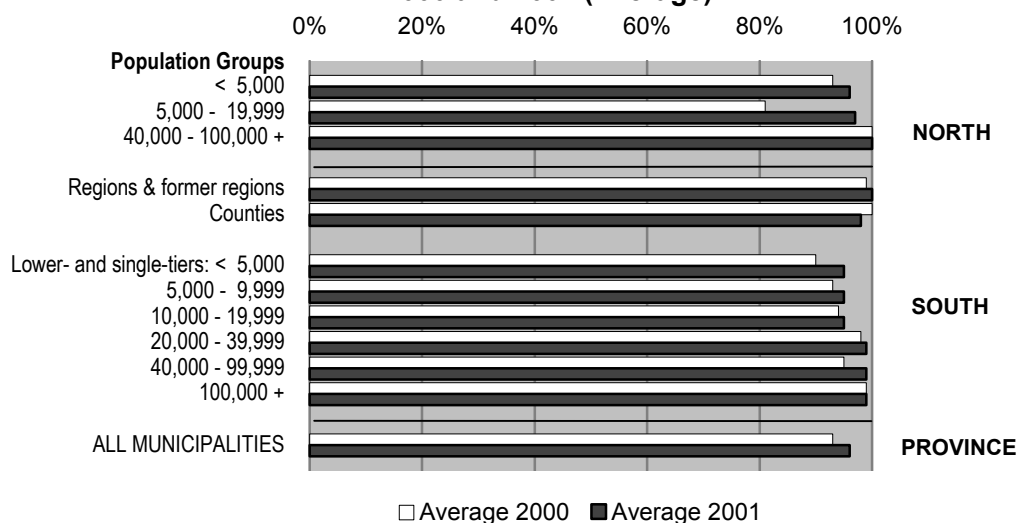
Percentage of Winter Event Responses that Met or Exceeded Municipal Road Maintenance Standards 2000 and 2001

Population	Average 2000	Average 2001	Range 2000	Range 2001	Mun. Reporting Measure 2000	Mun. Reporting Measure 2001
	%	%	%	%	#	#
NORTH						
< 5,000	93%	96%	0% to 100%	30% to 100%	82	71
5,000 – 19,999	81%	97%	0% to 100%	90% to 100%	11	12
40,000 – 100,000 +	100%	100%	100%	100%	2	2
SOUTH						
Regions & former regions	99%	100%	92% to 100%	100%	10	11
Counties	100%	98%	99% to 100%	75% to 100%	14	15
Lower- & single-tiers:						
< 5,000	90%	95%	0% to 100%	13% to 100%	69	47
5,000 – 9,999	93%	95%	6% to 100%	50% to 100%	49	54
10,000 – 19,999	94%	95%	0% to 100%	0% to 100%	52	53
20,000 – 39,999	98%	99%	84% to 100%	91% to 100%	16	19
40,000 – 99,999	95%	99%	10% to 100%	91% to 100%	19	17
100,000 +	99%	99%	93% to 100%	93% to 100%	13	15
ALL MUNICIPALITIES	93%	96%	0% to 100%	0% to 100%	337	316

FIR reference: SLC 92 2251 07. Condition: result does not exceed 100%.

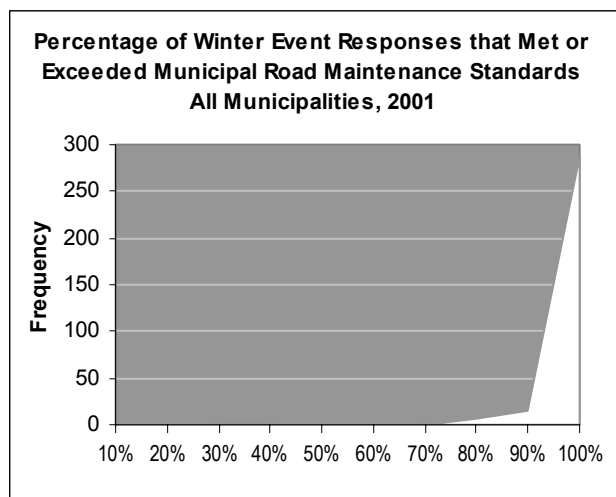
NOTES: Median for all groups in 2000 and 2001 is 100%.

Percentage of Winter Event Responses that Met or Exceeded Municipal Road Maintenance Standards 2000 and 2001 (Average)



Roadways — Winter Control: Effectiveness

Percentage of winter event responses that met or exceeded municipal road maintenance standards.



Objective

Provide an appropriate winter storm event response.

Factors affecting results

Effectiveness results are influenced by the same factors which affect the efficiency measure, including climate, road types and traffic volume, development patterns, equipment condition and local service level decisions.

The high performance results for this measure indicate that municipalities have been successful in meeting the service level standards set by their own councils—which must, at a minimum, conform to minimum service level standards set by the province. Since service levels may differ widely from municipality to municipalities, municipal standards should be considered before making comparisons.

The median response for the province and all population categories is 100%. The average reflects outlying values. For example in 2000, only 15 of the 337 municipalities reporting the measure had values less than 100%. These results affected the provincial average (93%), but not the median (100%). See the range in the table for minimum and maximum values for each municipal group. Average results were graphed to demonstrate the differences between municipal groups.

Conventional Transit: Efficiency

Operating costs for conventional transit per regular service passenger trip.

Operating costs for conventional transit

Total number of conventional transit passenger trips in service area

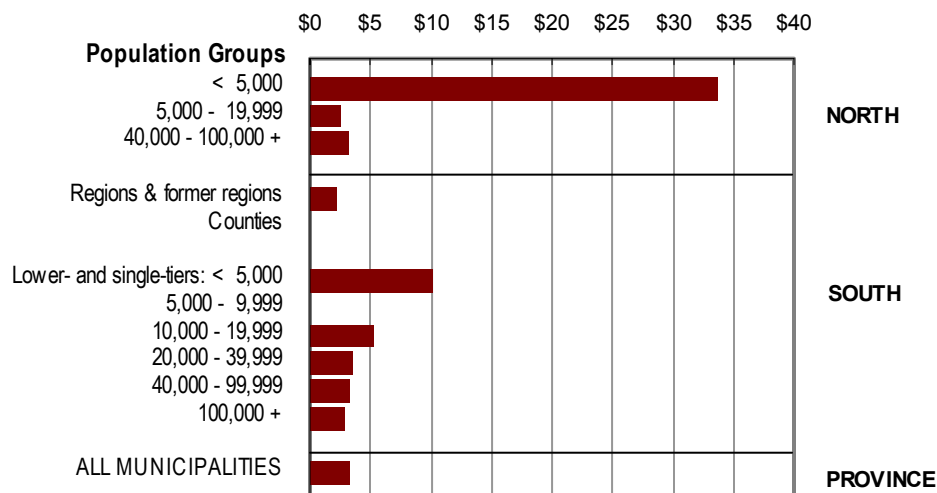
**Operating Costs for Conventional Transit
per Regular Service Passenger Trip
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	13.02	33.65	33.65	13.02 to 33.65	3
5,000 – 19,999		2.56	3.04	2.56 to 3.04	2
40,000 – 100,000 +	2.10	3.22	3.56	2.10 to 3.56	3
SOUTH					
Regions & former regions	2.00	2.16	2.95	1.86 to 3.25	6
Counties					0
Lower- & single-tiers:					
< 5,000		10.08		10.08	1
5,000 – 9,999					0
10,000 – 19,999	5.07	5.30	25.19	2.79 to 43.09	9
20,000 – 39,999	2.94	3.49	5.76	2.45 to 9.71	8
40,000 – 99,999	3.07	3.37	3.66	1.87 to 10.19	13
100,000 +	2.17	2.75	3.16	1.93 to 3.93	10
ALL MUNICIPALITIES	2.76	3.34	5.30	1.86 to 43.09	55

FIR reference: SLC 91 2301 13.

All municipalities reporting the measure are included in the Summary.

**Operating Costs for Conventional Transit
per Regular Service Passenger Trip
2001 (Median)**



Conventional Transit: Effectiveness

Number of conventional transit passenger trips per person in the service area in a year.

Total number of conventional transit passenger trips in the service area in a year

Population of service area

**Number of Conventional Transit Passenger Trips per Person
in the Service Area in a Year, 2000 and 2001**

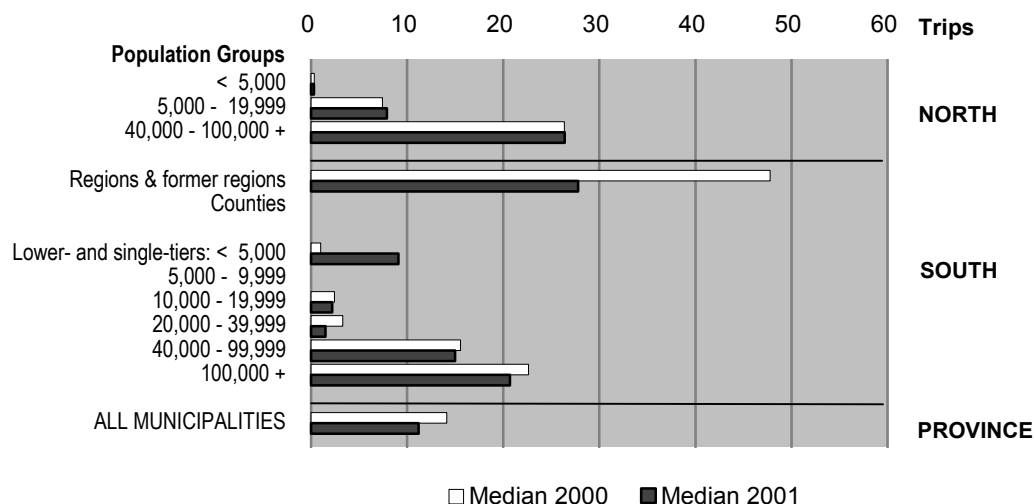
Population	Median 2000	Median 2001	Range 2000	Range 2001	Mun. Reporting Measure 2000	Mun. Reporting Measure 2001
	\$	\$	\$	\$	#	#
NORTH						
< 5,000	0.3	0.3	0.3 to 1	0.3	5	3
5,000 – 19,999	7	8	7 to 17	8 to 18	2	2
40,000 – 100,000 +	26	26	20 to 43	21 to 39	4	3
SOUTH						
Regions & former regions	48	28	26 to 182	11 to 162	3	5
Counties					0	0
Lower- & single-tiers:						
< 5,000	1	9	1 to 12	9	2	1
5,000 – 9,999					0	0
10,000 – 19,999	2	2	0.3 to 8	0.3 to 7	9	10
20,000 – 39,999	3	2	0.4 to 21	0.8 to 21	9	8
40,000 – 99,999	16	15	6 to 47	3 to 49	14	13
100,000 +	23	21	6 to 44	6 to 47	12	10
ALL MUNICIPALITIES	14	11	0.3 to 182	0.3 to 162	60	55

FIR reference: SLC 92 2351 07. All municipalities reporting measure included.

NOTES: In the <5,000 group in the North, 4 municipalities participated in a joint transit system and reported identical results of 0.3 in 2000. In 2001, 3 municipalities participated in the transit system.

If the number of municipalities reporting is small, a change in the number reporting can have a noticeable effect on results. See results for regions and former regions: 3 reported in 2000, increasing to 5 in 2001.

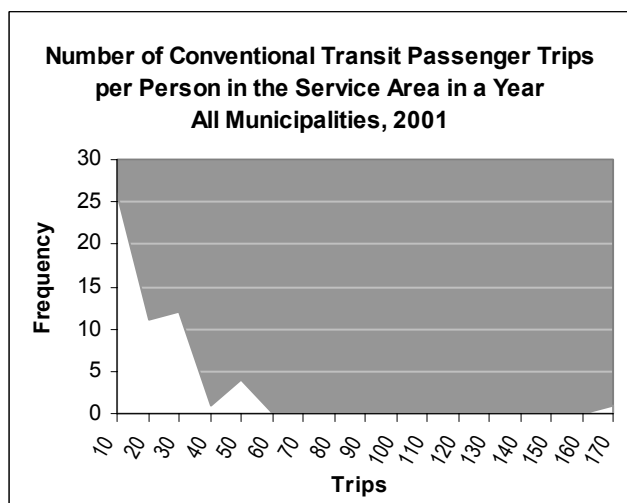
**Number of Conventional Transit Passenger Trips per Person
in the Service Area in a Year, 2000 and 2001 (Median)**



Conventional Transit: Efficiency and Effectiveness

Operating costs for conventional transit per regular service passenger trip.

Number of conventional transit trips per person in the service area in a year.



Objectives

Efficiency: Efficient conventional transit services.

Effectiveness: Maximum utilization of transit services.

Notes

Fifty-five municipalities reported transit measures.

No counties reported measures.

The number of municipalities in each group reporting a measure should be considered. When a small number of municipalities in a population group reports a measure, results will be affected.

In the South, operating costs per regular service passenger trip decreased with population size. Toronto is grouped with regions and former regions.

**Factors
affecting
results**

Results are influenced by:

- Transit ridership.
- Level of transit investment.
- Service levels: routes, hours of operation, frequency of service.
- Urban form.
- Density.
- Development patterns.
- Population density.
- Age of fleet.
- Distribution of demand (peaks).
- Fuel costs.
- Salary levels.
- Vehicle type: e.g. low floor buses, light rail trains (LRT), subway.

Service levels affect results. For example, costs and ridership will be affected if service is offered to a limited area or there are few routes. Hours of operation and decisions about Sunday and holiday service affect results.

Urban form affects routes and ridership. Separate downtown cores tend to disperse trips and service which may reduce ridership.

Aging fleets may incur higher operating costs.

Wastewater Collection: Efficiency

Operating costs for the collection of wastewater per kilometre of wastewater main.

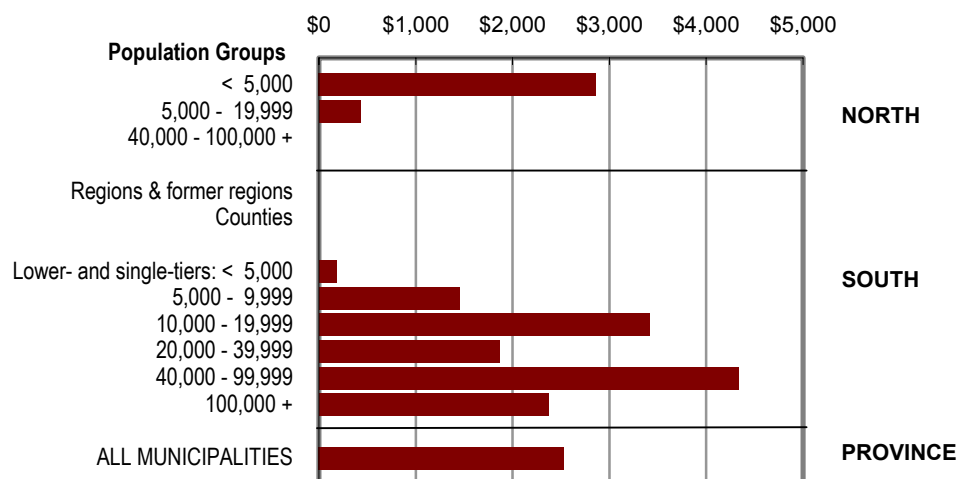
$$\frac{\text{Operating costs for the collection of wastewater}}{\text{Total kilometres of wastewater main}}$$

Operating Costs for the Collection of Wastewater per Kilometre of Wastewater Main, 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	1,807	2,862	3,892	395 to 6,816	10
5,000 – 19,999		429	2,571	429 to 2,571	2
40,000 – 100,000 +					0
SOUTH					
Regions & former regions					0
Counties					0
Lower- & single-tiers:					
< 5,000		178	4,441	178 to 4,441	2
5,000 – 9,999	941	1,451	2,421	941 to 2,421	3
10,000 – 19,999	1,735	3,411	4,579	237 to 8,632	12
20,000 – 39,999	1,494	1,863	2,793	689 to 4,480	9
40,000 – 99,999	2,545	4,329	7,800	2,545 to 7,800	3
100,000 +	1,209	2,372	3,410	1,129 to 9,108	7
ALL MUNICIPALITIES	1,451	2,531	3,826	178 to 9,108	48

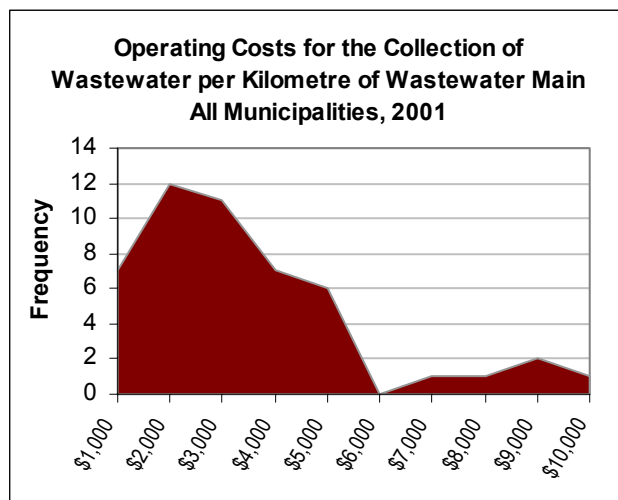
FIR reference: SLC 91 3103 13.

NOTES: Municipalities were excluded if measure exceeded \$15,000.

Operating Costs for the Collection of Wastewater per Kilometre of Wastewater Main, 2001 (Median)

Wastewater Services: Efficiency

Operating costs for the collection of wastewater per kilometre of wastewater main.



Objective

Efficient municipal wastewater services.

Notes

For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reports only the integrated measure for wastewater collection, treatment and disposal and not the individual measures.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Urban/rural mix, e.g. whether service is provided to rural areas.
- Precipitation and severity of storm events.
- Extent of water infiltration into sewers.
- Age, condition and size of the wastewater collection system.
- Type of wastewater mains, e.g. gravity fed, low pressure.
- Number and size of pumping stations.
- Variations in flow.
- General maintenance, inspection and flow monitoring.

- Division of responsibility for wastewater collection between local area municipalities and regional municipality. For example, the local municipality may be responsible for sewage collection from the street line to the trunk line. The regional municipality may be responsible for sewage conveyance from the municipality to water pollution control plants.

Wastewater Treatment and Disposal: Efficiency

Operating costs for the treatment and disposal of wastewater per megalitre.

Operating costs for the treatment and disposal of wastewater

Total megalitres of wastewater treated

Operating Costs for the Treatment and Disposal of Wastewater per Megalitre, 2001

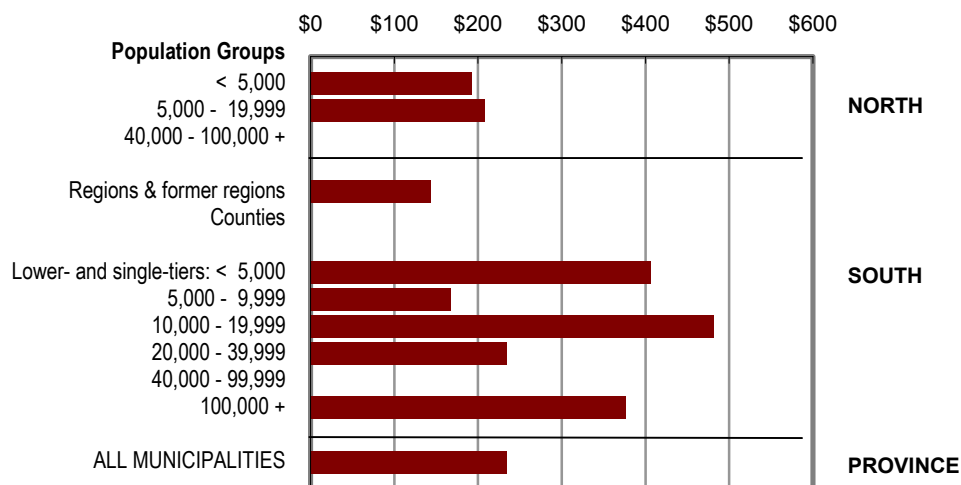
Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	123	193	480	70 to 586	9
5,000 – 19,999		208	273	208 to 273	2
40,000 – 100,000 +					
SOUTH					
Regions & former regions	144	144	220	144 to 220	3
Counties					0
Lower- & single-tiers:					
< 5,000	195	407	674	195 to 780	4
5,000 – 9,999	148	168	178	148 to 938	4
10,000 – 19,999		482		482	1
20,000 – 39,999	217	235	238	175 to 378	5
40,000 – 99,999					
100,000 +	376	377	379	376 to 379	3
ALL MUNICIPALITIES	168	235	407	70 to 938	31

FIR reference: SLC 91 3104 13.

Municipalities were excluded if:

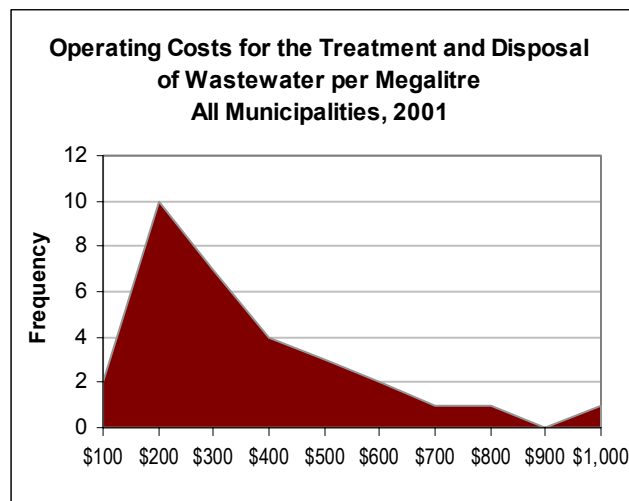
- Population was under 50,000 and megalitres were greater than 49,000.
- Population was between 50,000 and 100,000 and megalitres were ≥ 100,000.
- Megalitres were less than 3.0.

Operating Costs for the Treatment and Disposal of Wastewater per Megalitre, 2001 (Median)



Wastewater Services: Efficiency

Operating costs for the treatment and disposal of wastewater per megalitre.

**Objective**

Efficient municipal wastewater services.

Notes

For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reports only the integrated measure for wastewater collection, treatment and disposal and not the individual measures.

Factors affecting results

Results are influenced by:

- Population and density of service area.
- Urban/rural mix, e.g. whether collection and treatment service is provided to rural areas.
- Whether sanitary and storm sewer systems are combined or separate.
- Precipitation and severity of storm events.
- Extent of water infiltration into the sewers.
- Number, size and scale of municipal treatment plants.
- Type of treatment (primary, secondary, tertiary or lagoon).
- Treatment levels.
- Destination of the plant's effluent (lake vs. stream).
- Method of sludge disposal (landfill, incineration or land application).
- Volume and strength of industrial sewage.
- Frequency of cleaning, flushing and blockage removal.

- Variations in flow.
- General maintenance, inspection and flow monitoring.
- Wastewater testing.
- Certificate of Approval requirements (C of A).
- Error in the calculation of megalitres.

Wastewater Collection, Treatment and Disposal (Integrated System): Efficiency

Operating costs for collection, treatment and disposal of wastewater per megalitre.

Operating costs for the collection, treatment and disposal of wastewater
Total megalitres of wastewater treated

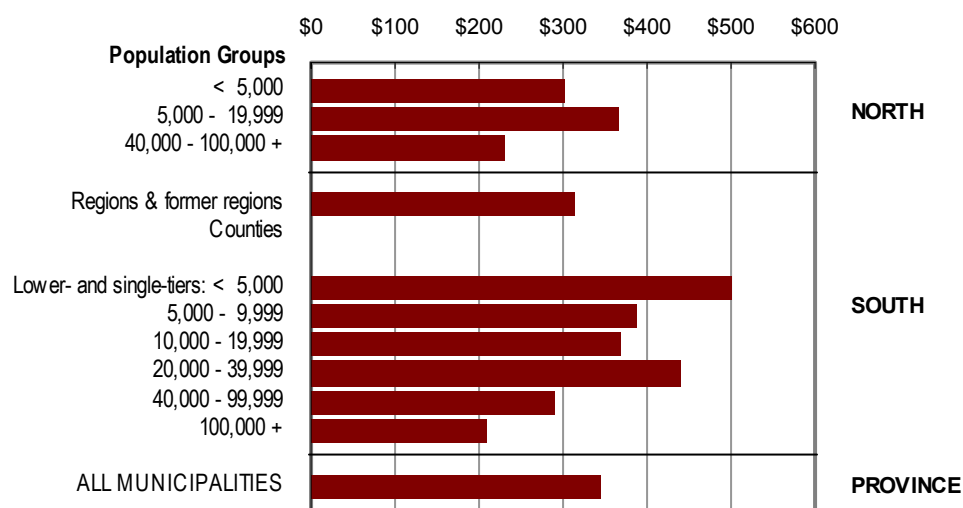
Operating Costs for the Collection, Treatment and Disposal of Wastewater per Megalitre, 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	162	302	535	74 to 4,128	24
5,000 – 19,999	304	366	394	80 to 3,327	7
40,000 – 100,000 +		232	243	232 to 243	2
SOUTH					
Regions & former regions	183	315	350	138 to 915	7
Counties					0
Lower- & single-tiers:					
< 5,000	345	500	768	166 to 1,611	15
5,000 – 9,999	253	387	467	73 to 2,756	25
10,000 – 19,999	257	369	498	20 to 1,577	24
20,000 – 39,999	308	440	449	124 to 735	9
40,000 – 99,999	187	290	338	177 to 399	8
100,000 +	164	210	290	164 to 356	4
ALL MUNICIPALITIES	242	345	491	20 to 4,128	125

FIR reference: SLC 91 3105 13. Municipalities were excluded if:

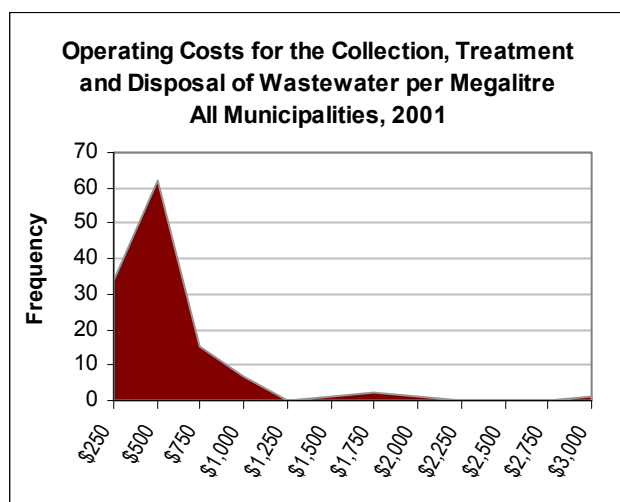
- Population was under 50,000 and megalitres were > 49,000.
- Population was between 50,000 and 100,000 and megalitres were ≥ 100,000.
- Megalitres were less than 5.0.
- Megalitres of treated wastewater did not correspond to megalitres in effectiveness measure.
(Megalitres of treated wastewater in 91 3105 11 exceeded megalitres of treated plus untreated wastewater in 92 3155 06 less megalitres of untreated wastewater in 92 3155 05 ± 1.5)

Operating Costs for the Collection, Treatment and Disposal of Wastewater per Megalitre, 2001 (Median)



Wastewater Services: Efficiency

Operating costs for the collection, treatment and disposal of wastewater per megalitre.



Objective

Efficient municipal wastewater services.

Notes

For the wastewater efficiency measures, municipalities reported costs for a separate sanitary sewer system or a combined sanitary and storm sewer system.

If the municipality has an integrated wastewater system, it reports only the integrated measure for wastewater collection, treatment and disposal and not the individual measures.

Factors affecting results

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Urban/rural mix, e.g. whether collection and treatment service is provided to rural areas.
- Precipitation and severity of storm events.
- Extent of water infiltration into sewers.
- Variations in flow.
- General maintenance, inspection and flow monitoring.
- Division of responsibility for wastewater collection between local area municipalities and regional municipality. For example, the local municipality may be responsible for sewage collection from the street line to the trunk line. The regional municipality may be responsible for sewage conveyance from the municipality to water pollution control plants.

Collection of wastewater is also influenced by:

- Age, condition and size of the wastewater collection system.
- Type of wastewater mains, e.g. gravity fed, low pressure.
- Number and size of pumping stations.

Treatment and disposal is influenced by:

- Number, size and scale of municipal treatment plants.
- Type of treatment (primary, secondary, tertiary or lagoon).
- Treatment levels.
- Destination of the plant's effluent (lake vs. stream).
- Method of sludge disposal (landfill, incineration or land application).
- Volume and strength of industrial sewage.
- Frequency of cleaning, flushing and blockage removal.
- Wastewater testing.
- Certificate of Approval requirements (C of A).
- Error in the calculation of megalitres.

Wastewater Main Backups: Effectiveness

Number of wastewater main backups per 100 kilometres of wastewater main in a year.

Total number of backed up wastewater connections

Kilometres of wastewater mains / 100

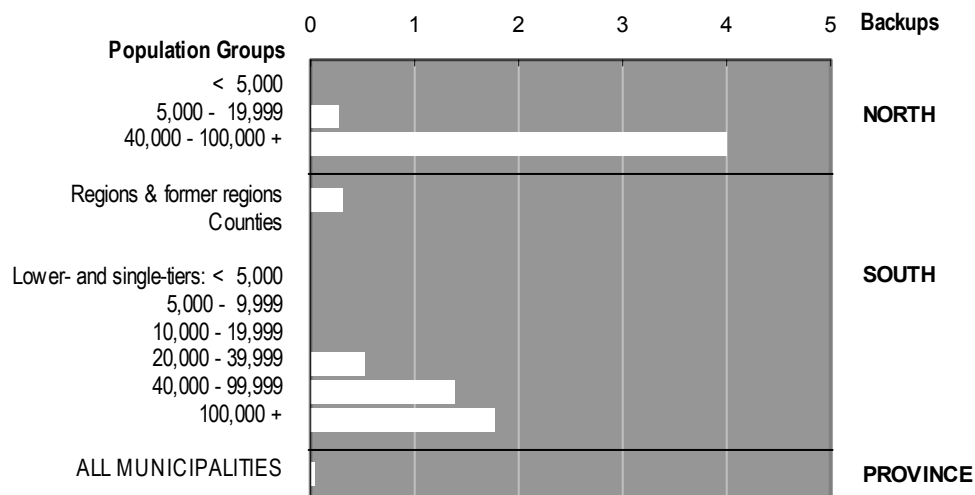
**Number of Wastewater Main Backups per 100 Kilometres
of Wastewater Main in a Year, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	0.0	0.0	5.7	0.0 to 65.5	42
5,000 – 19,999	0.04	0.3	27.8	0.0 to 454.6	9
40,000 – 100,000 +	1.2	4.0	6.9	1.2 to 6.9	3
SOUTH					
Regions & former regions	0.05	0.3	4.4	0.0 to 5.2	9
Counties					0
Lower- & single-tiers:					
< 5,000	0.0	0.0	0.0	0.0 to 106.7	26
5,000 – 9,999	0.0	0.0	1.4	0.0 to 52.9	35
10,000 – 19,999	0.0	0.01	3.9	0.0 to 48.7	40
20,000 – 39,999	0.0	0.5	3.9	0.0 to 11.9	15
40,000 – 99,999	0.03	1.4	6.7	0.0 to 89.7	11
100,000 +	0.4	1.8	3.0	0.3 to 24.3	8
ALL MUNICIPALITIES	0.0	0.03	3.9	0.0 to 454.6	198

FIR reference: SLC 92 3154 07.

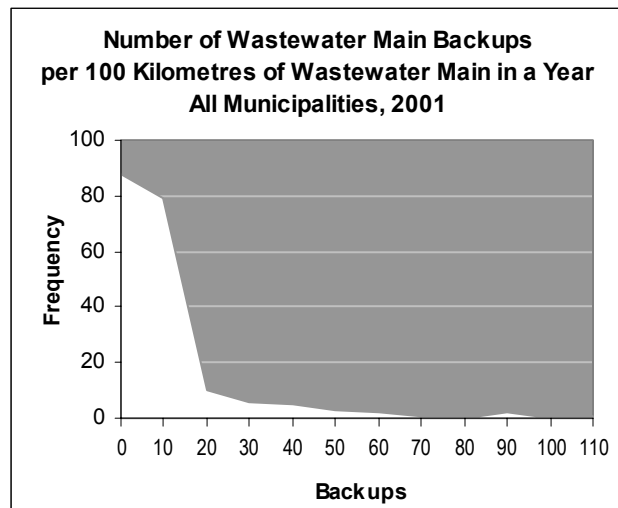
NOTES: Municipalities were excluded if the denominator did not equal the number of kilometres of wastewater main in the efficiency measure in 91 3103 06 divided by 100 ± 1.5. A municipality was also excluded because the denominator appeared too large for the population.

**Number of Wastewater Main Backups per 100 Kilometres
of Wastewater Main in a Year, 2001 (Median)**



Wastewater Main Backups: Effectiveness

Number of wastewater main backups per 100 kilometres of wastewater main in a year.



Objective

Municipal sewage management practices prevent environmental and human health hazards.

Factors affecting results

Results are influenced by:

- Error in calculation of denominator: kilometres divided by 100.
- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Kilometres in the sewer system.
- Extent of inflow and infiltration to sewers.
- Age, condition, materials of collection system.
- Illegal connections.
- Downspouts directly connected to combined sewage systems.
- Level of precipitation.
- Number and severity of storm events.
- Definition of wastewater main backups and method of measuring number of backups.

Wastewater Bypasses Treatment: Effectiveness

Percentage of wastewater estimated to have bypassed treatment.

Estimated megalitres of untreated wastewater

Total megalitres of wastewater, including treated and untreated wastewater

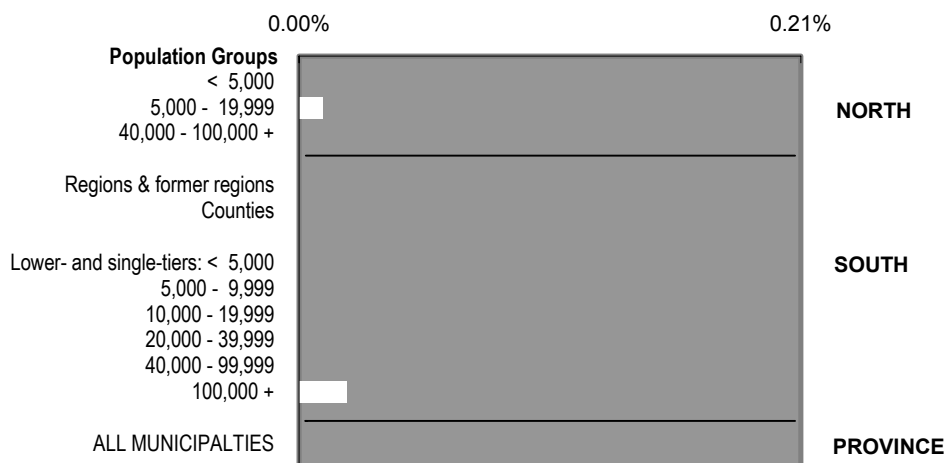
X 100

Percentage of Wastewater Estimated to have Bypassed Treatment 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	%	%	%	%	#
NORTH					
< 5,000	0%	0%	0%	0% to 7.2%	21
5,000 – 19,999	0%	0.01%	0.1%	0% to 1.8%	5
40,000 – 100,000 +		0%		0%	1
SOUTH					
Regions & former regions	0%	0%	0.2%	0.0% to 3.6%	4
Counties					0
Lower- & single-tiers:					
< 5,000	0%	0%	0%	0% to 0.2%	12
5,000 – 9,999	0%	0%	0.01%	0% to 0.9%	20
10,000 – 19,999	0%	0%	0%	0% to 1.4%	13
20,000 – 39,999	0%	0%	0%	0% to 0.3%	9
40,000 – 99,999	0%	0%	0.02%	0% to 2.4%	6
100,000 +	0%	0.02%	1.4%	0.02% to 2.5%	4
ALL MUNICIPALITIES	0%	0%	0.01%	0% to 7.2%	95

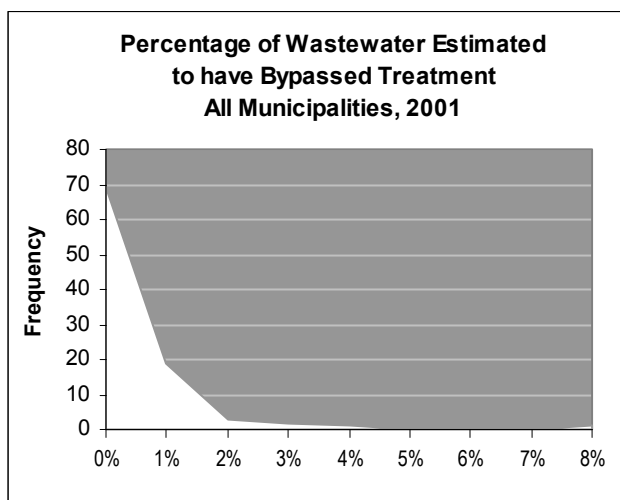
FIR reference: SLC 92 3155 07. Municipalities were excluded if:

- Population was under 50,000 and megalitres of treated + untreated wastewater were > 49,000.
- Population was between 50,000 & 100,000 and treated + untreated megalitres were ≥ 100,000.
- Megalitres of treated + untreated wastewater were less than 5.0.
- Megalitres of treated and untreated wastewater did not correspond to efficiency measures.
(Treated megalitres in 91 3104 06 or 91 3105 06 exceeded treated + untreated megalitres in 92 3155 06 less untreated megalitres in 92 3155 05 ± 1.5)

Percentage of Wastewater Estimated to have Bypassed Treatment 2001 (Median)

Wastewater Bypasses Treatment: Effectiveness

Percentage of wastewater estimated to have bypassed treatment.



Objective

Municipal sewage management practices prevent environmental and human health hazards.

Notes on Calculations

Municipalities had difficulty calculating megalitres in this measure. A megalitre equals 1,000,000 litres.

Forty percent of the municipalities reporting the measure in the Financial Information Return were not included in the summary because of calculation errors.

The denominator of the effectiveness measure is megalitres of treated wastewater plus megalitres of untreated wastewater. For verification, this amount less megalitres of untreated wastewater in the numerator were compared to megalitres of treated wastewater in the efficiency measure. Municipalities reported either the measure for wastewater treatment and disposal or the integrated measure for wastewater collection, treatment and disposal.

In the frequency distribution, the first interval is 0%, the second interval is 1%, etc. Although intervals generally represent a range of values, zero was selected as the first interval, because most municipalities reported 0% of wastewater bypassed treatment.

**Factors
affecting
results**

Results are influenced by:

- Whether sanitary and storm sewer systems are combined or separate.
- Population and density of service area.
- Extent of inflow and infiltration to sewers.
- Downspouts directly connected to combined sewage systems.
- Illegal connections.
- Level of precipitation.
- Number and severity of storm events.
- Treatment capacity of treatment plant.
- Error in calculation of megalitres.

Treatment of Drinking Quality Water: Efficiency

Operating costs for the treatment of drinking quality water per megalitre.

Operating costs for the treatment of drinking quality water

Total megalitres of drinking quality water treated

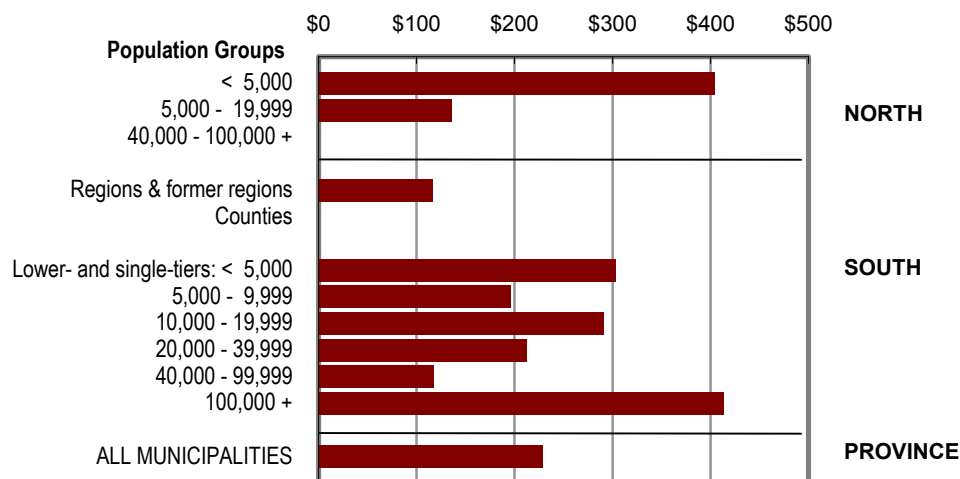
Operating Costs for the Treatment of Drinking Quality Water per Megalitre, 2001 (Median)

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	146	404	799	9 to 1,284	9
5,000 – 19,999		136	207	136 to 207	2
40,000 – 100,000 +					
SOUTH					
Regions & former regions	75	117	211	74 to 244	5
Counties					0
Lower- & single-tiers:					
< 5,000		303	600	303 to 600	2
5,000 – 9,999	117	196	227	117 to 463	4
10,000 – 19,999	289	291	429	218 to 744	6
20,000 – 39,999	173	213	415	113 to 626	6
40,000 – 99,999		118		118	1
100,000 +	56	413	413	56 to 413	4
ALL MUNICIPALITIES	136	229	415	9 to 1,284	39

FIR reference: SLC 91 3303 13.

NOTES: Municipalities with populations under 50,000 were excluded if megalitres treated exceeded 49,000.

Operating Costs for the Treatment of Drinking Quality Water per Megalitre, 2001 (Median)



Treatment of Drinking Quality Water: Efficiency

Operating costs for the treatment of drinking quality water per megalitre.



Objective

Efficient treatment of drinking quality water.

Notes

If the municipality has an integrated water system, it reports only the measure for the treatment and distribution of drinking quality water per megalitre and not the individual measures.

Factors affecting results

Results are influenced by:

- Utilization (residential vs. industrial).
- Source of raw water (lake vs. wells).
- Quality of raw water.
- Type of treatment.
- Number and capacity of water treatment plants.
- Number and capacity of pumping stations.
- Age and condition of treatment plants and pumping stations.
- Distance of raw water to treatment plants.
- Service area and consumption levels.

Distribution of Drinking Quality Water: Efficiency

Operating costs for the distribution of drinking quality water per kilometre of water distribution pipe.

$$\frac{\text{Operating costs for the distribution of drinking quality water}}{\text{Total kilometres of water distribution pipe}}$$

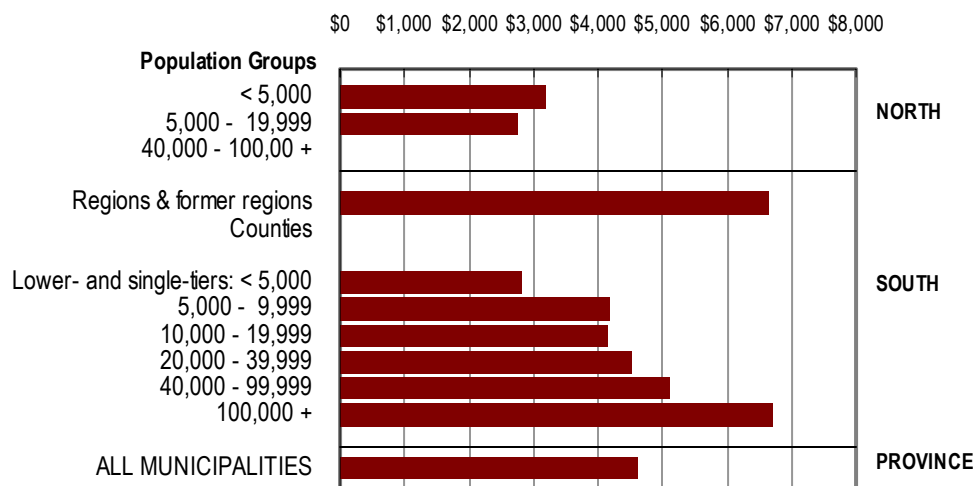
Operating Costs for the Distribution of Drinking Quality Water per Kilometre of Water Distribution Pipe 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	2,137	3,196	7,116	1,038 to 15,682	10
5,000 – 19,999		2,764	13,081	2,764 to 13,081	2
40,000 – 100,000 +					
SOUTH					
Regions & former regions	5,766	6,644	15,066	5,766 to 15,066	3
Counties					
Lower- & single-tiers:					
< 5,000	1,935	2,833	11,115	776 to 25,202	9
5,000 – 9,999	2,050	4,185	6,150	592 to 18,183	12
10,000 – 19,999	3,213	4,168	5,180	2,584 to 9,678	12
20,000 – 39,999	3,606	4,524	6,960	1,801 to 21,143	10
40,000 – 99,999	4,623	5,121	5,735	4,623 to 9,508	4
100,000 +	3,667	6,706	7,786	3,076 to 12,094	7
ALL MUNICIPALITIES	2,904	4,623	7,073	592 to 25,202	69

FIR reference: SLC 91 3304 13.

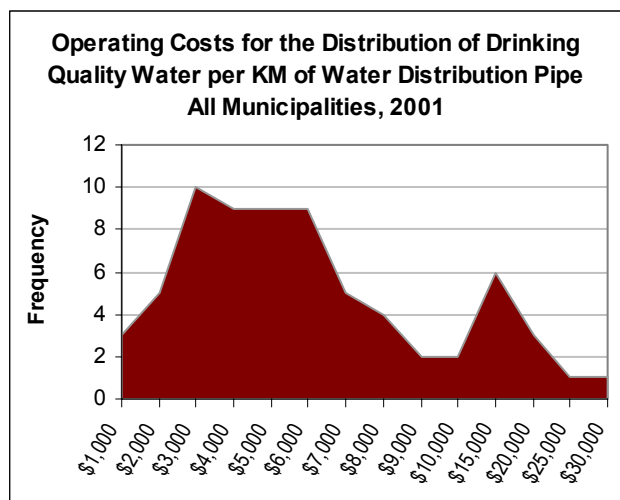
NOTES: All municipalities were included even if they reported less than 5.0 km of pipe.

Operating Costs for the Distribution of Drinking Quality Water per Kilometre of Water Distribution Pipe 2001 (Median)



Distribution of Drinking Quality Waster: Efficiency

Operating costs for the distribution of drinking quality water per kilometre of water distribution pipe.



Objective

Efficient distribution costs of drinking quality water.

Notes

If the municipality has an integrated water system, it reports only the measure for the treatment and distribution of drinking quality water per megalitre. It does not report the individual measures.

Results are influenced by:

Factors affecting results

- Service area.
- Consumption levels.
- Number of connections.
- Kilometres of water distribution pipe.
- Age and condition of distribution system.
- Number of private wells.

Smaller municipalities with few kilometres of water distribution pipe may have higher unit costs for this measure.

Treatment and Distribution of Drinking Quality Water (Integrated System): Efficiency
 Operating costs for the treatment and distribution of drinking quality water per megalitre.

$$\frac{\text{Operating costs for the treatment and distribution of drinking quality water}}{\text{Total megalitres of drinking quality water treated}}$$

**Operating Costs for the Treatment and Distribution
of Drinking Quality Water per Megalitre
2001**

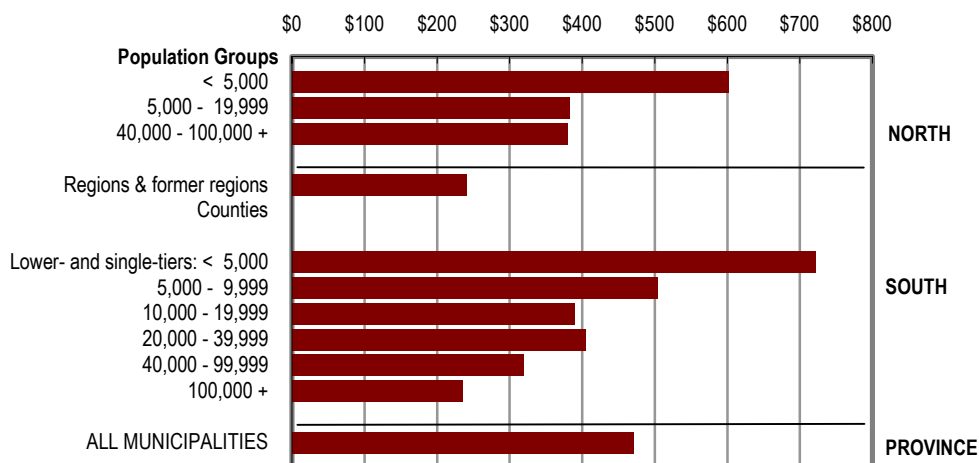
Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	355	602	1,211	63 to 5,842	32
5,000 – 19,999	127	383	447	55 to 595	8
40,000 – 100,000 +		380	390	380 to 390	2
SOUTH					
Regions & former regions	204	240	343	169 to 677	8
Counties					
Lower- & single-tiers:					
< 5,000	600	722	1,231	265 to 2,107	16
5,000 – 9,999	327	504	730	186 to 3,619	28
10,000 – 19,999	316	389	509	112 to 1,018	26
20,000 – 39,999	298	405	550	200 to 641	10
40,000 – 99,999	275	319	454	196 to 661	6
100,000 +	201	235	491	185 to 580	5
ALL MUNICIPALITIES	318	471	722	55 to 5,842	141

FIR reference: SLC 91 3305 13.

Municipalities were excluded if:

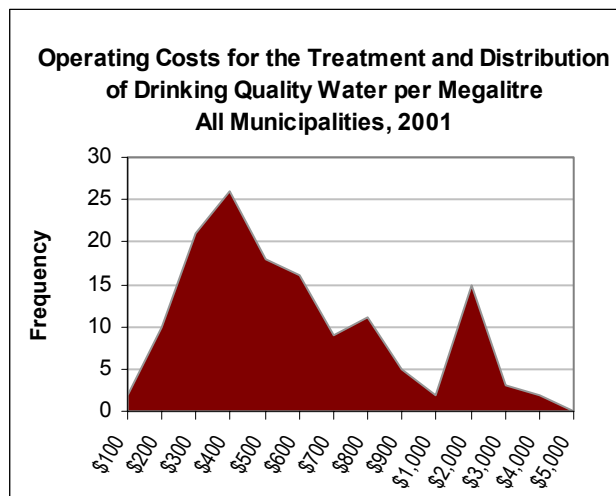
- Population was under 50,000 and megalitres treated exceeded 49,000.
- Population was between 50,000 and 100,000 and megalitres treated ≥ 100,000.
- Less than 3 megalitres treated.

**Operating Costs for the Treatment and Distribution
of Drinking Quality Water per Megalitre
2001 (Median)**



Treatment and Distribution of Drinking Quality Water (Integrated System): Efficiency

Operating costs for the treatment and distribution of drinking quality water per megalitre



Objective

Efficient treatment and distribution costs of drinking quality water.

Note

Only single-tiers report this measure or municipalities with complete responsibility for the treatment and distribution of drinking quality water. Municipalities reporting this measure did not report the individual measures for treatment and distribution.

Factors affecting results

Treatment results are influenced by:

- Utilization (residential vs. industrial).
- Source of raw water (lake vs. wells).
- Quality of raw water.
- Type of treatment.
- Number and capacity of water treatment plants.
- Number and capacity of pumping stations.
- Age and condition of treatment plants and pumping stations.
- Distance of raw water to treatment plants.
- Service area and consumption levels.
- Number of connections.
- Kilometres of water distribution pipe.
- Age and condition of distribution system.
- Number of private wells.

Distribution results are influenced by:

- Service area.
- Consumption levels.
- Number of connections.
- Kilometres of water distribution pipe.
- Age, condition, size of distribution system.
- Number of private wells.

Boil Water Advisories: Effectiveness

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.

Summation of: (Number of boil water days times the number of connections affected)

Total connections in the service area

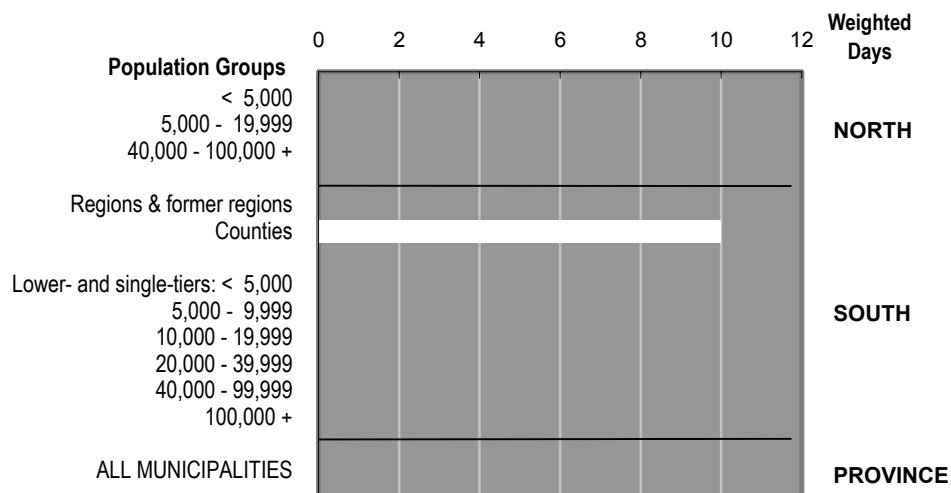
**Weighted Number of Days when a Boil Water Advisory
Applicable to a Municipal Water Supply was in Effect
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	0	0	0	0 to 365	39
5,000 – 19,999	0	0	0	0	10
40,000 – 100,000 +	0	0	12	0 to 12	3
SOUTH					
Regions & former regions	0	0	0	0 to 11	6
Counties		10		10	1
Lower- & single-tiers:					
< 5,000	0	0	0	0 to 185	28
5,000 – 9,999	0	0	0	0 to 15	37
10,000 – 19,999	0	0	0	0 to 79	35
20,000 – 39,999	0	0	0	0 to 10	15
40,000 – 99,999	0	0	.02	0 to 0.14	6
100,000 +	0	0	0	0	5
ALL MUNICIPALITIES	0	0	0	0 to 365	185

FIR reference: SLC 92 3355 07.

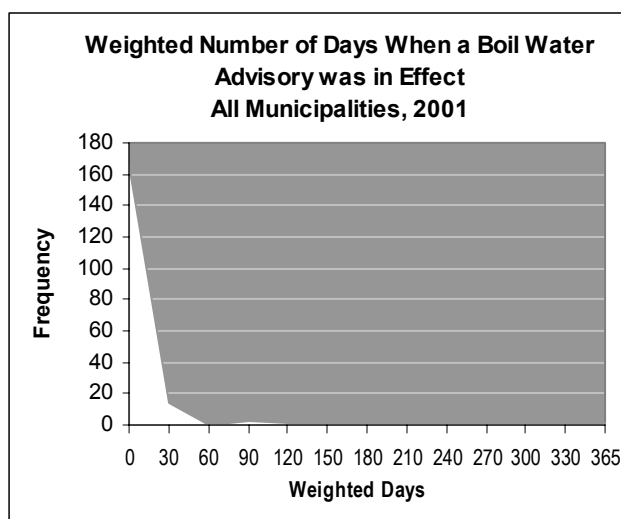
All municipalities reporting the measure are included in the Summary.

**Weighted Number of Days when a Boil Water Advisory
Applicable to a Municipal Water Supply was in Effect
2001 (Median)**



Boil Water Advisories: Effectiveness

Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.

**Objective**

Water is safe and meets local needs.

Notes

This measure represents the weighted number of days a boil water advisory is in effect for a municipal water supply. The number of boil water days is weighted by the number of connections affected. For example, if a boil water is in effect for 20 days and 50% of the households are affected, then the weighted number of days is 10 days.

In the frequency distribution, the first interval is 0 and the second interval is labelled 30 and includes from 1 to 30 weighted boil water days. Although intervals generally represent a range of values, zero was selected as an interval because most municipalities had zero weighted boil water days. It is important to distinguish this group from those municipalities who had more than one weighted boil water day.

One municipality had boil water advisories in effect for 365 weighted days but because of the small size of the graph, no value is visible. For each municipal group, check the range of values in the table.

**Factors
affecting
results**

Results are influenced by:

- Source of drinking water (lake vs. well).
- The number of individual sources supplying the drinking water system.
- Testing and quality control of raw water and treated water.
- Frequency of cleaning and flushing water mains.
- State of repair of water mains.
- Purchase of drinking water from another municipality.
- Type of water treatment.
- Capacity to clean, treat and deliver safe drinking water.

If a municipality purchases treated water from another municipality, the municipality making the purchase is subject to any boil water advisories imposed on the municipality providing the treated water.

Breaks in Water Mains: Effectiveness

Number of breaks in water mains per 100 kilometres of water main pipe in a year.

$$\frac{\text{Number of breaks in water mains in a year}}{\text{Total kilometres of water main pipe} / 100}$$

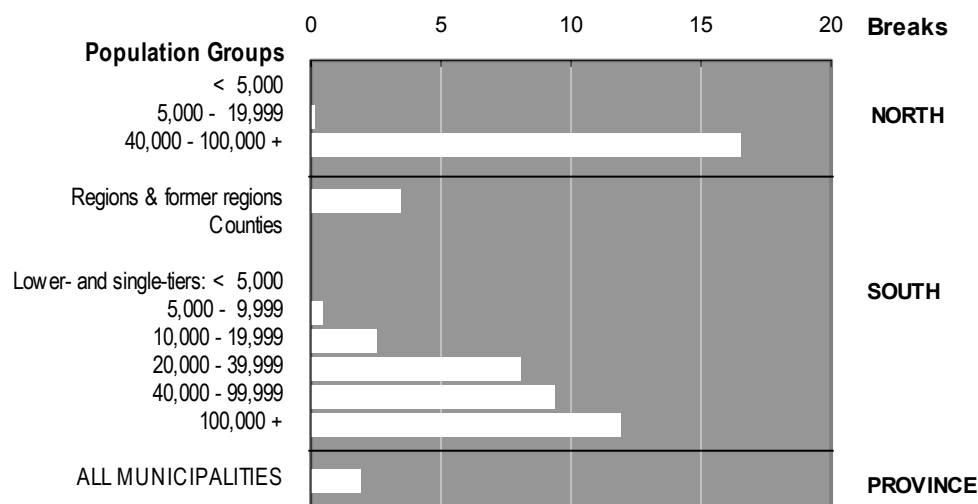
**Number of Breaks in Water Mains per 100 Kilometres
of Water Main Pipe in a Year, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	0	0	8	0 to 94	42
5,000 – 19,999	0.09	0.19	13	0 to 34	11
40,000 – 100,000 +	0.18	17	26	0.18 to 26	3
SOUTH					
Regions & former regions	1	3	11	0 to 17	8
Counties					
Lower- & single-tiers:					
< 5,000	0	0.06	5	0 to 72	29
5,000 – 9,999	0.10	0.48	11	0 to 38	37
10,000 – 19,999	0.08	3	10	0 to 47	47
20,000 – 39,999	4	8	12	0 to 51	16
40,000 – 99,999	4	9	18	0.03 to 35	11
100,000 +	6	12	15	5 to 38	8
ALL MUNICIPALITIES	0	2	11	0 to 94	212

FIR reference: SLC 92 3356 07.

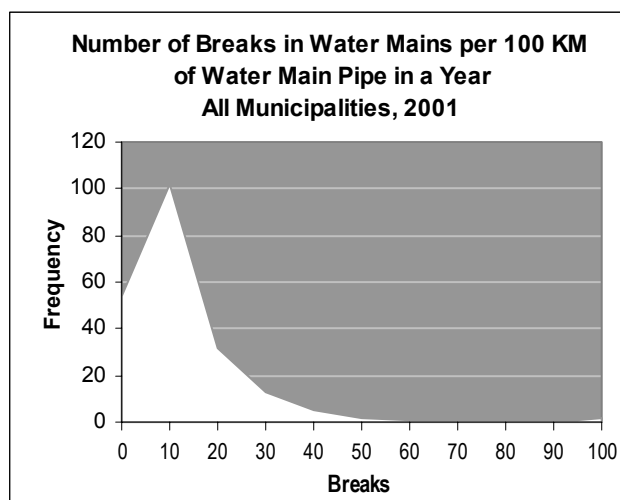
NOTES: If the efficiency measure SLC 91 3304 11 was completed, a municipality was excluded if kilometres of water main pipe in SLC 92 3356 06 did not equal kilometres in SLC 91 3304 11 / 100.

**Number of Breaks in Water Mains per 100 Kilometres
of Water Main Pipe in a Year, 2001 (Median)**



Breaks in Water Mains: Effectiveness

Number of breaks in water mains per 100 kilometres of water main pipe in a year.



Objective

Improve system reliability.

Notes

In the frequency distribution, the first interval is 0 and the second interval is labelled 10 and includes 1 to 10 breaks. Although intervals generally represent a range of values, zero was selected as an interval because many municipalities reported zero breaks.

Factors affecting results

Results are influenced by:

- Age of water main pipes and fittings.
- Pipe material.
- Depth of water main pipe.
- Soil conditions.
- Pressure range and fluctuation.
- Hydro faults.
- Programs for maintenance and rehabilitation of water mains.
- Severity of winter weather and frost penetration.
- Corrosion.
- Highway construction.

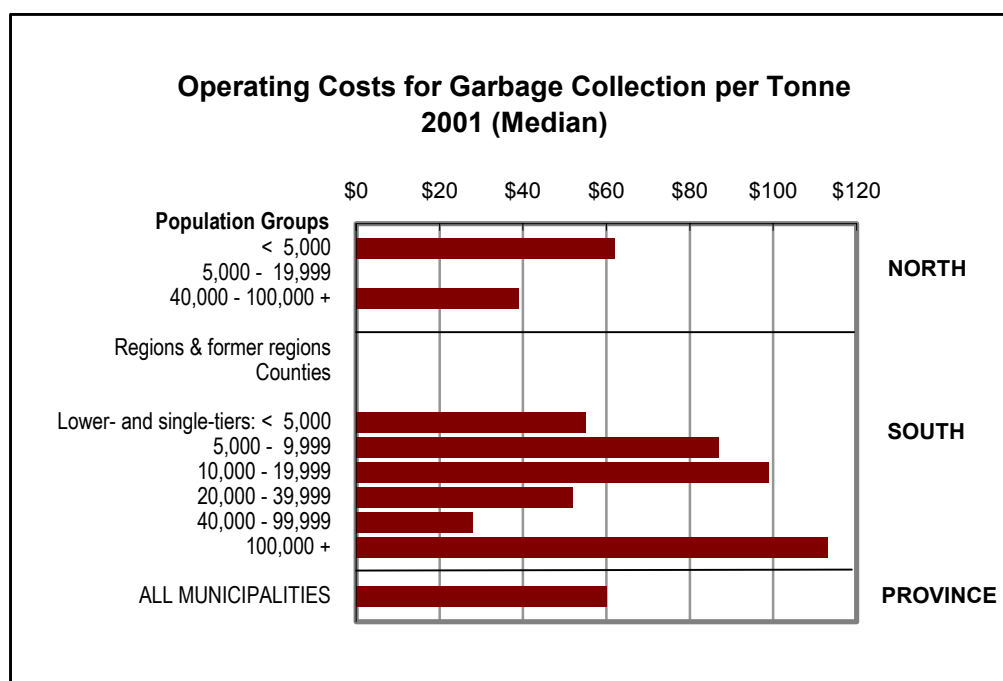
Garbage Collection: Efficiency

Operating costs for garbage collection per tonne.

$$\frac{\text{Operating costs for garbage collection}}{\text{Total tonnes received from all property classes}}$$

Operating Costs for Garbage Collection per Tonne 2001					
Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	23	62	96	23 to 96	3
5,000 – 19,999					0
40,000 – 100,000 +		39		39	1
SOUTH					
Regions & former regions					0
Counties					0
Lower- & single-tiers:					
< 5,000		55	61	55 to 61	2
5,000 – 9,999		87	94	87 to 94	2
10,000 – 19,999	60	99	134	57 to 163	5
20,000 – 39,999	51	52	58	51 to 65	4
40,000 – 99,999	14	28	38	14 to 67	4
100,000 +		113		113	1
ALL MUNICIPALITIES	51	60	94	14 to 163	22

FIR reference: SLC 91 3402 13.
NOTES: All municipalities reporting this measure are included in the Summary.



Garbage Collection: Efficiency

Operating costs for garbage collection per household.

Operating costs for garbage collection

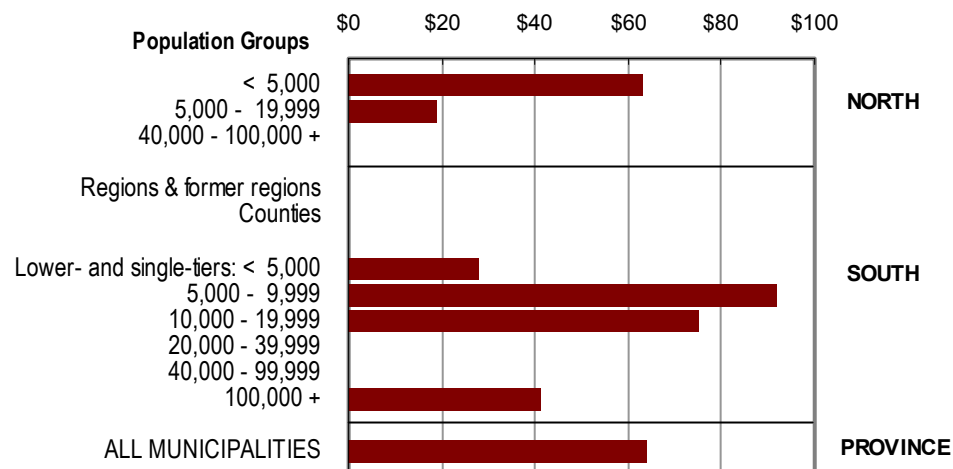
Total households

**Operating Costs for Garbage Collection per Household
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	42	63	114	10 to 219	14
5,000 – 19,999		19	66	19 to 66	2
40,000 – 100,000 +					0
SOUTH					
Regions & former regions					0
Counties					0
Lower- & single-tiers:					
< 5,000	28	28	97	12 to 107	6
5,000 – 9,999	14	92	93	14 to 132	4
10,000 – 19,999	50	75	85	27 to 88	5
20,000 – 39,999					0
40,000 – 99,999					0
100,000 +		41			1
ALL MUNICIPALITIES	28	64	93	10 to 219	32

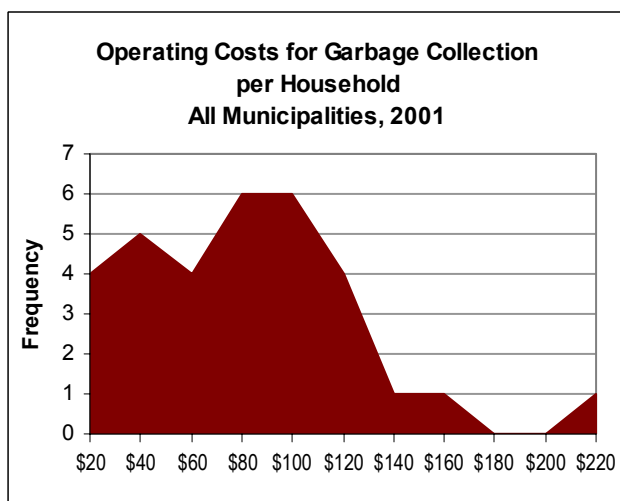
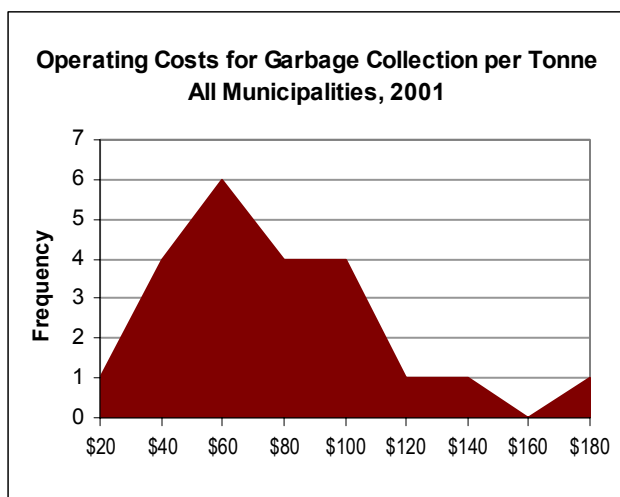
FIR reference: SLC 91 3402 13.

NOTES: Municipalities were excluded if households in the denominator did not equal total households reported in SLC 90 0010 02 and the municipality did not indicate that it provides service to other municipalities.

**Operating Costs for Garbage Collection per Household
2001 (Median)**

Solid Waste: Efficiency

Operating costs for garbage collection per tonne or per household.

**Objectives**

Efficient garbage collection services.

Notes

If a municipality uses households for the solid waste measures, total households are reported, not the number of households served. If a municipality provides collection to relatively few households, the efficiency measure may appear low because operating costs are divided by all households.

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a “tonne” is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. They did not report the individual measures for garbage collection, garbage disposal and solid waste diversion.

One region which provides the same level of garbage collection services to all local area municipalities noted a significant difference in operating costs on the order of \$10 to \$20 per household depending on whether the municipality was predominantly urban or rural.

**Factors
affecting
results**

Results are influenced by:

- Rural/urban mix.
- Level of garbage collection service, including percentage of residents receiving service, industrial/commercial/institutional clients, frequency of pick-up.
- Mix of residential, industrial, commercial and institutional waste.
- Urban form: distance between pick-up points and amount collected at each point.
- Haulage distance to landfill sites and transfer stations.
- Special collection services, e.g. on-call collection of bulky and white goods offered.
- Bag or container limits. Ban of leaf/yard waste and recyclables from waste collection.
- Presence of competitive market forces.
- Reliance on private contractors.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Garbage Disposal: Efficiency

Operating costs for garbage disposal per tonne.

Operating costs for garbage disposal

 Total tonnes disposed of from all property classes

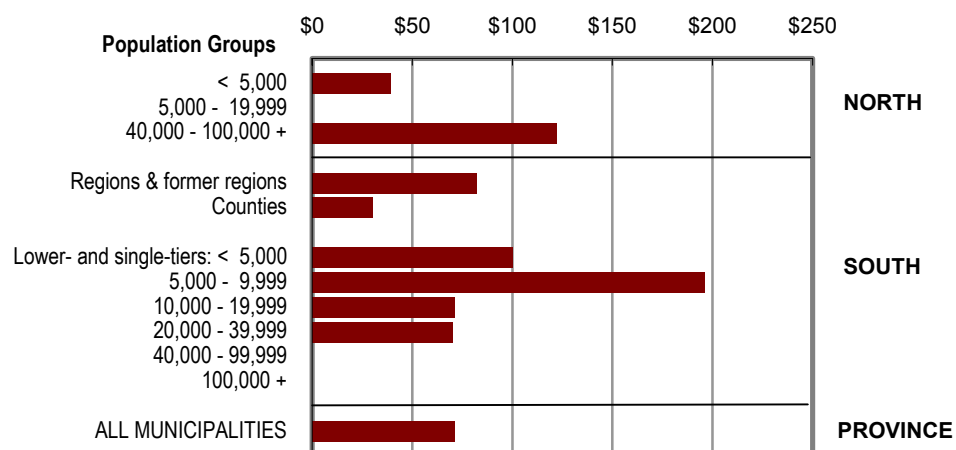
**Operating Costs for Garbage Disposal per Tonne
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000		39	52	39 to 52	2
5,000 – 19,999					0
40,000 – 100,000 +		122		122	1
SOUTH					
Regions & former regions		82	96	82 to 96	2
Counties		30	53	30 to 53	2
Lower- & single-tiers:					
< 5,000		100		100	1
5,000 – 9,999		196		196	1
10,000 – 19,999		71		71	1
20,000 – 39,999	70	70	115	70 to 115	3
40,000 – 99,999					0
100,000 +					0
ALL MUNICIPALITIES	53	71	100	30 to 196	13

FIR reference: SLC 91 3502 13.

NOTES: In the South, lower-tier municipalities are excluded if garbage disposal is an upper-tier responsibility. Limited comparability because only 1 to 3 municipalities in each group reported.

**Operating Costs for Garbage Disposal per Tonne
2001 (Median)**



Garbage Disposal: Efficiency

Operating costs for garbage disposal per household.

Operating costs for garbage disposal

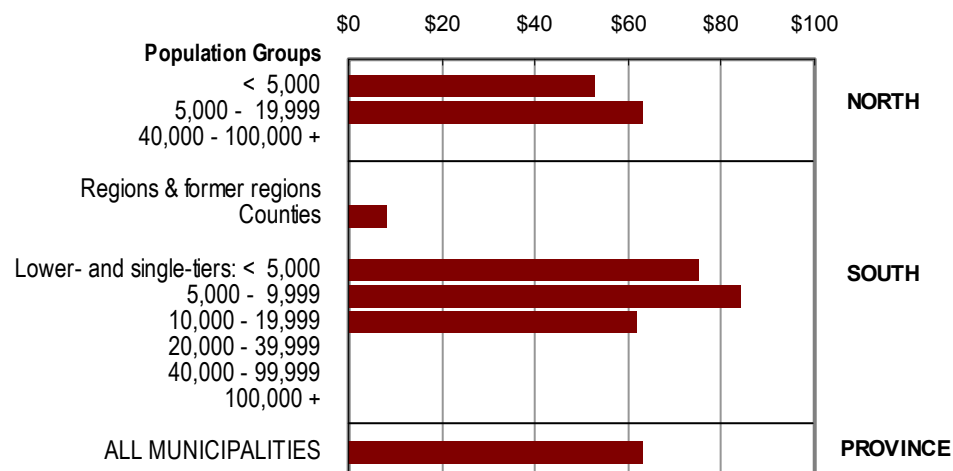
Total households

**Operating Costs for Garbage Disposal per Household
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	36	53	75	3 to 685	41
5,000 – 19,999		63		63	1
40,000 – 100,000 +					
SOUTH					
Regions & former regions					0
Counties		8		8	1
Lower- & single-tiers:					
< 5,000	37	75	138	31 to 417	25
5,000 – 9,999	66	84	99	54 to 185	8
10,000 – 19,999	37	62	63	37 to 89	4
20,000 – 39,999					0
40,000 – 99,999					0
100,000 +					0
ALL MUNICIPALITIES	37	63	89	3 to 685	80

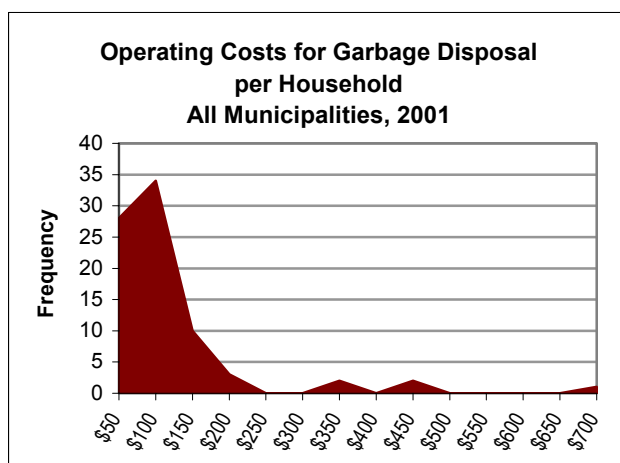
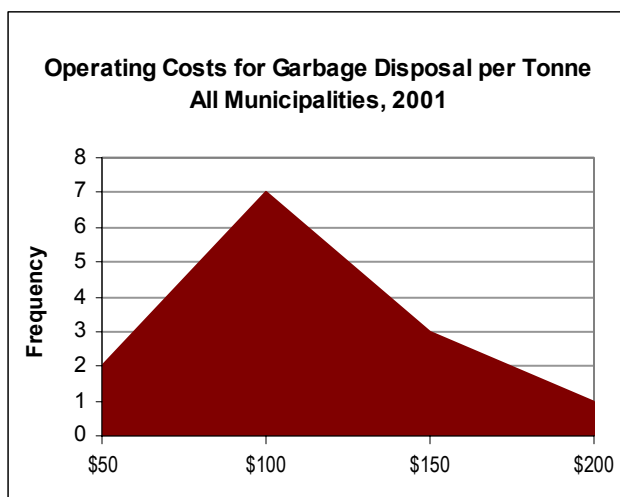
FIR reference: SLC 91 3502 13.

NOTES: Municipalities were excluded if households reported in denominator did not equal households reported in 90 0010 02. In the South, lower-tiers were excluded if garbage disposal was an upper-tier responsibility.

**Operating Costs for Garbage Disposal per Household
2001 (Median)**

Solid Waste: Efficiency

Operating costs for garbage disposal per tonne or per household.

**Objectives**

Efficient garbage disposal services.

Notes

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a “tonne” is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. They did not report the individual measures for garbage collection, garbage disposal and solid waste diversion.

**Factors
affecting
results**

Results are influenced by:

- Rural/urban mix.
- Mix of residential, industrial, commercial and institutional waste.
- Disposal method: landfill, incineration, composting, export, etc.
- Number of landfill sites.
- Retroactive recognition of landfill closure and post-closure costs.
- Cost of perpetual care of landfill sites.
- Recycling programs and solid waste diversion rate.
- Presence of competitive market forces.
- Reliance on private contractors.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Solid Waste Diversion: Efficiency

Operating costs for solid waste diversion (recycling) per tonne.

Operating costs for solid waste diversion

Total tonnes of solid waste diverted from all property classes

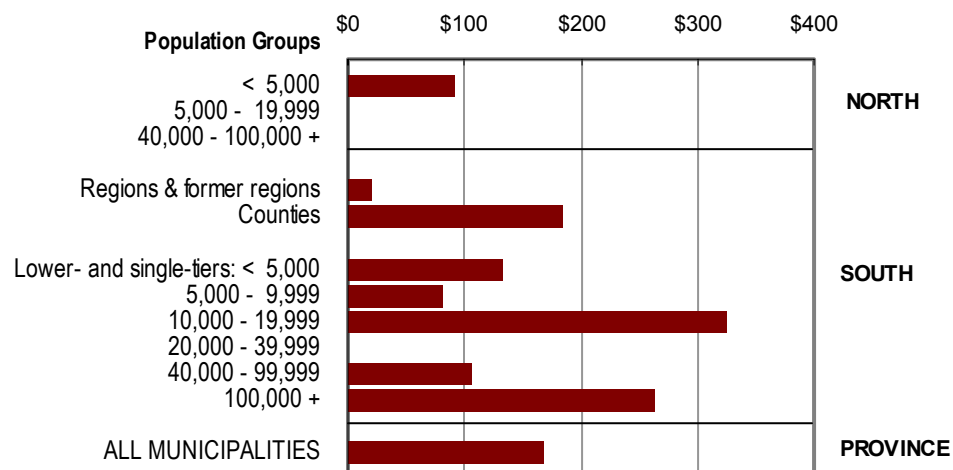
**Operating Costs for Solid Waste Diversion (Recycling) per Tonne
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000		91		91	1
5,000 – 19,999					0
40,000 – 100,000 +					0
SOUTH					
Regions & former regions		20		20	1
Counties		183		183	1
Lower- & single-tiers:					
< 5,000		132	172	132 to 172	2
5,000 – 9,999		80	219	80 to 219	2
10,000 – 19,999		324	334	324 to 334	2
20,000 – 39,999					0
40,000 – 99,999	51	106	168	51 to 168	3
100,000 +		262			1
ALL MUNICIPALITIES	91	168	219	20 to 334	13

FIR reference: SLC 91 3602 13.

Municipalities were excluded if tonnes diverted from all property classes in 91 3602 11:

- Were not equal to tonnes diverted from all property classes in 92 3656 05 $\pm$ 1.5 (diversion measure based on combined residential and ICI tonnage).
- Were less than residential tonnes diverted in 92 3655 05 (residential diversion measure).

**Operating Costs for Solid Waste Diversion (Recycling) per Tonne
2001 (Median)**

Solid Waste Diversion: Efficiency

Operating costs for solid waste diversion (recycling) per household.

Operating costs for solid waste diversion

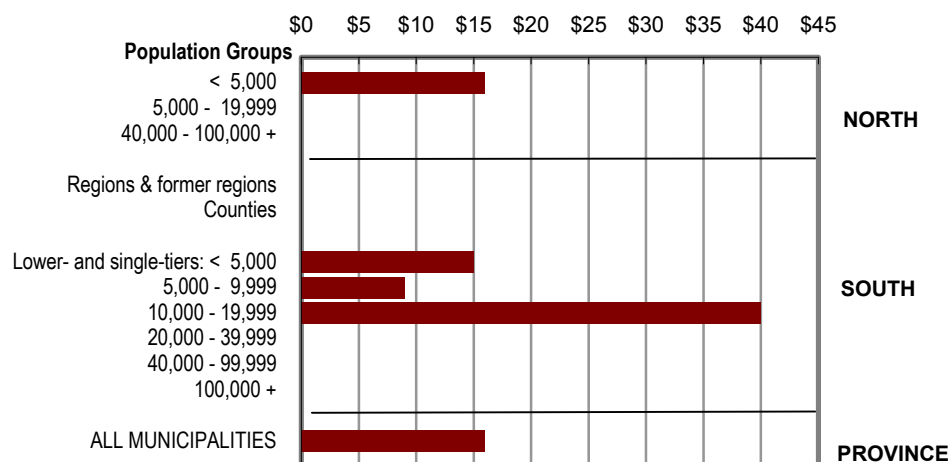
Total households

**Operating Costs for Solid Waste Diversion (Recycling)
per Household, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	7	16	34	2 to 87	15
5,000 – 19,999					0
40,000 – 100,000 +					0
SOUTH					
Regions & former regions					0
Counties					0
Lower- & single-tiers:					
< 5,000	9	15	22	3 to 55	16
5,000 – 9,999	7	9	35	7 to 65	4
10,000 – 19,999	23	40	43	2 to 43	3
20,000 – 39,999					0
40,000 – 99,999					0
100,000 +					0
ALL MUNICIPALITIES	9	16	30	2 to 87	38

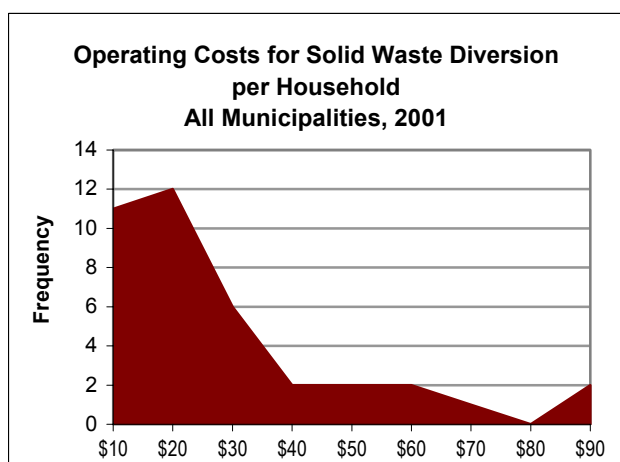
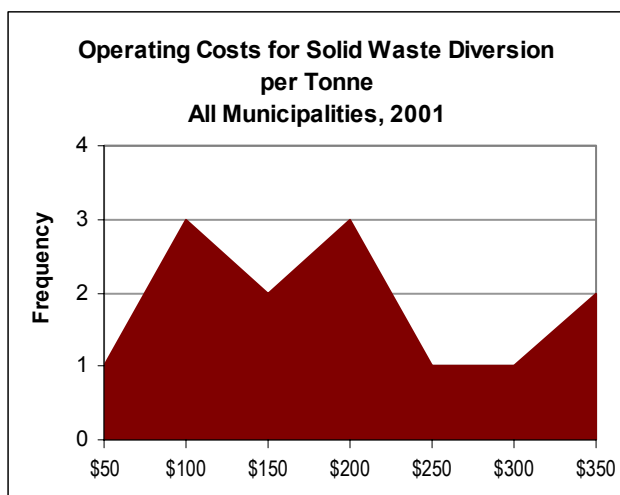
FIR reference: SLC 91 3602 13.

NOTES: Municipalities were excluded if households in the denominator did not equal total households for the municipality as reported in SLC 90 0010 02. In the South, lower-tiers are excluded if garbage disposal is an upper-tier responsibility.

**Operating Costs for Solid Waste Diversion (Recycling)
per Household, 2001 (Median)**

Solid Waste: Efficiency

Operating costs for solid waste diversion (recycling) per tonne or per household.

**Objective**

Efficient solid waste diversion services.

Notes

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a “tonne” is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measure represent tonnes from all property classes.

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. They did not report the individual measures for garbage collection, garbage disposal and solid waste diversion.

Tonnes diverted from all property classes in the denominator were compared with the reporting of tonnes diverted in the effectiveness measures for diversion.

**Factors
affecting
results**

Results are influenced by:

- Rural/urban mix.
- Scope of diversion program and materials diverted.
- Mix of residential, industrial, commercial and institutional waste in diversion stream.
- Solid waste diversion rate, including level of public participation.
- Pick-up services and frequency of pick-up.
- Promotional and education budget.
- Haulage distance to processing and markets.
- Presence of competitive market forces.
- Reliance on private contractors
- Prices received for recyclable material.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Precipitation which impacts the weight of materials collected.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring the waste stream.

Solid Waste Management: Efficiency

Average operating costs for solid waste management (collection, disposal, diversion) per tonne.

Average operating costs for solid waste management

Total tonnes of solid waste disposed of and total tonnes diverted from all property classes

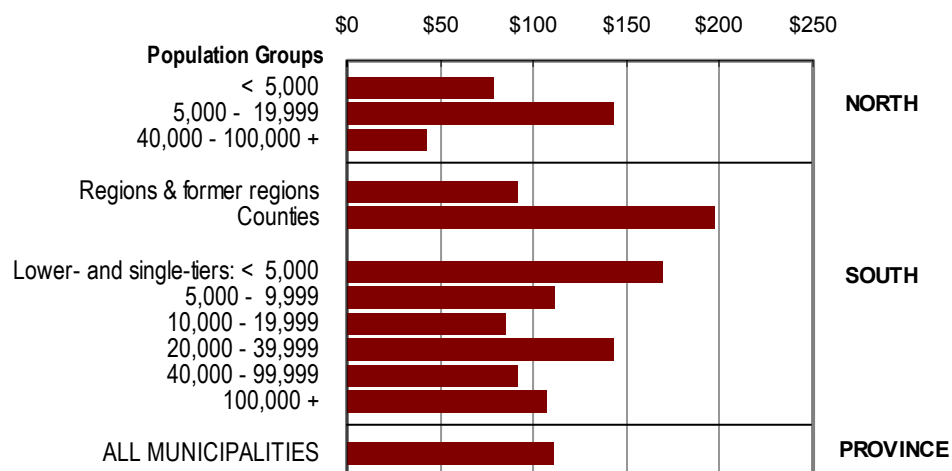
Average Operating Costs for Solid Waste Management per Tonne 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	53	78	111	53 to 166	4
5,000 – 19,999	82	143	273	82 to 273	3
40,000 – 100,000 +		43	54	43 to 54	2
SOUTH					
Regions & former regions	64	91	97	41 to 120	5
Counties		197		197	1
Lower- & single-tiers:					
< 5,000	153	170	187	153 to 263	4
5,000 – 9,999	80	112	149	31 to 180	7
10,000 – 19,999	49	85	162	16 to 182	8
20,000 – 39,999	111	143	188	74 to 223	10
40,000 – 99,999	63	91	195	50 to 208	7
100,000 +	73	107	113	73 to 113	3
ALL MUNICIPALITIES	74	111	170	16 to 273	54

FIR reference: SLC 91 3603 13. Municipalities excluded if:

- Tonnes disposed of plus tonnes diverted from all property classes in 91 3603 11 did not equal tonnes disposed on and diverted from all property classes in 92 3656 06 when effectiveness measure based on combined residential & ICI tonnage was reported.
- Contracted services reported as a negative number.

Average Operating Costs for Solid Waste Management per Tonne 2001 (Median)



Solid Waste Management: Efficiency

Average operating costs for solid waste management (collection, disposal, diversion) per household.

Average operating costs for solid waste management

Total households

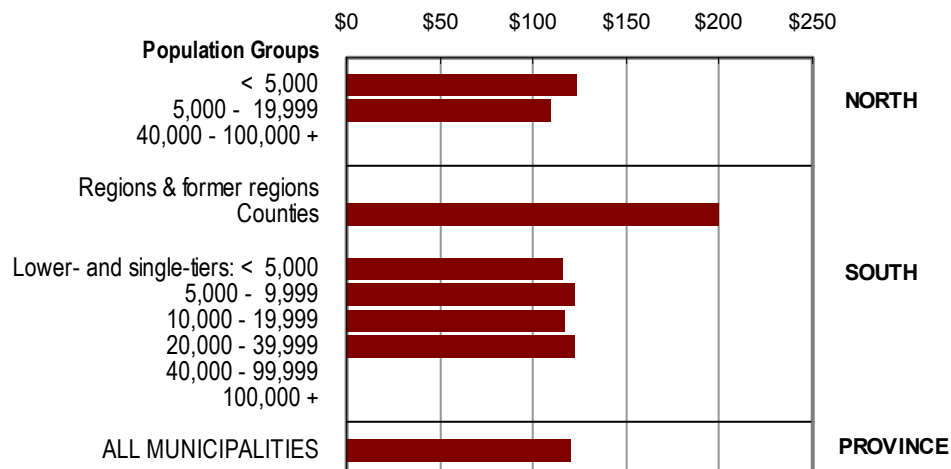
**Average Operating Costs for Solid Waste Management
per Household, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	\$	\$	\$	\$	#
NORTH					
< 5,000	104	123	174	32 to 284	17
5,000 – 19,999	68	109	123	68 to 123	3
40,000 – 100,000 +					0
SOUTH					
Regions & former regions					0
Counties		200		200	1
Lower- & single-tiers:					
< 5,000	97	116	133	64 to 318	16
5,000 – 9,999	73	122	155	30 to 272	21
10,000 – 19,999	93	117	128	83 to 158	12
20,000 – 39,999		122		122	1
40,000 – 99,999					0
100,000 +					0
ALL MUNICIPALITIES	88	120	158	30 to 318	71

FIR reference: SLC 91 3603 13.

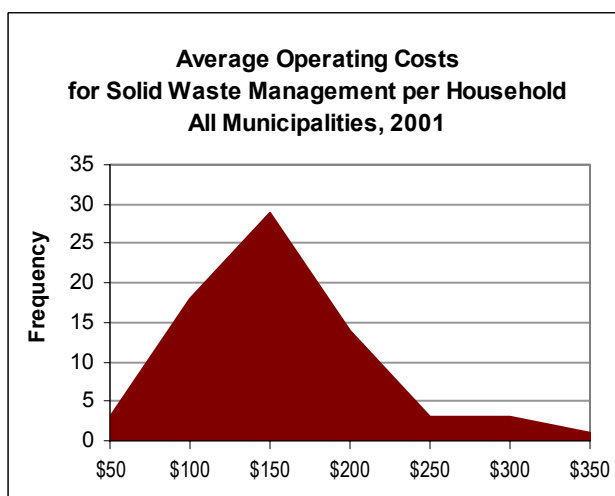
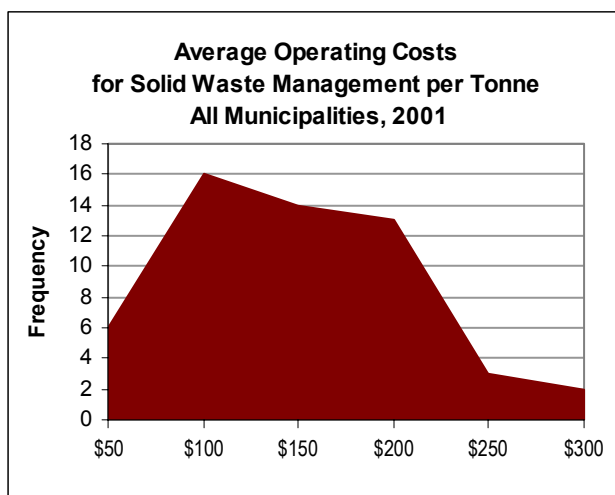
NOTES: Municipalities excluded if households in denominator did not equal total households reported in SLC 90 0010 02 and municipality did not say it provides service to other municipalities.

**Average Operating Costs for Solid Waste Management
per Household, 2001 (Median)**



Solid Waste: Efficiency

Average operating costs for solid waste management per tonne or per household.

**Objective**

Efficient solid waste management.

Notes

For 2001, municipalities with integrated solid waste management systems reported only the integrated efficiency measure: average operating costs for solid waste management per tonne or per household. They did not report the individual measures for garbage collection, garbage disposal and solid waste diversion. Solid waste management consists of garbage collection, garbage disposal and solid waste diversion. Therefore factors affecting this measure will include all the factors affecting the individual measures.

If tonnes are used as the denominator the result will be affected by whether tonnes are estimated or weighed. Note that a “tonne” is a metric tonne and equals 2,204.6 pounds or 1,000 kilograms. Tonnes used in the denominator of the efficiency measures represent tonnes from all property classes.

**Factors
affecting
results**

Results are influenced by:

- Rural/urban mix.
- Level of garbage collection service, including percentage of residents receiving service, industrial/commercial/ institutional clients, frequency of pick-up.
- Mix of residential, industrial, commercial and institutional waste.
- Urban form: distance between pick-up points and amount collected at each point.
- Bag or container limits. Ban of leaf/yard waste and recyclables from waste collection.
- Haulage distance to landfill sites and transfer stations.
- Disposal method: landfill, incineration, composing, export, etc.
- Number of landfill sites.
- Cost of perpetual care of landfill sites.
- Retroactive recognition of landfill closure and post-closure costs.
- Scope of solid waste diversion program and materials diverted.
- Diversion rate, including public participation levels. Presence of competitive market forces.
- Reliance on private contractors.

If tonnes are used, the following factors also apply:

- Whether scales are available at landfill sites and solid waste transfer stations.
- Whether tonnes are weighed or estimated.
- Whether Generally Accepted Principles (GAP) endorsed by Corporations Supporting Recycling (CSR) are used in measuring waste stream.

Solid Waste Management: Effectiveness

Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.

Number of complaints received in a year concerning
the collection of garbage and recycled materials

Total households / 1,000

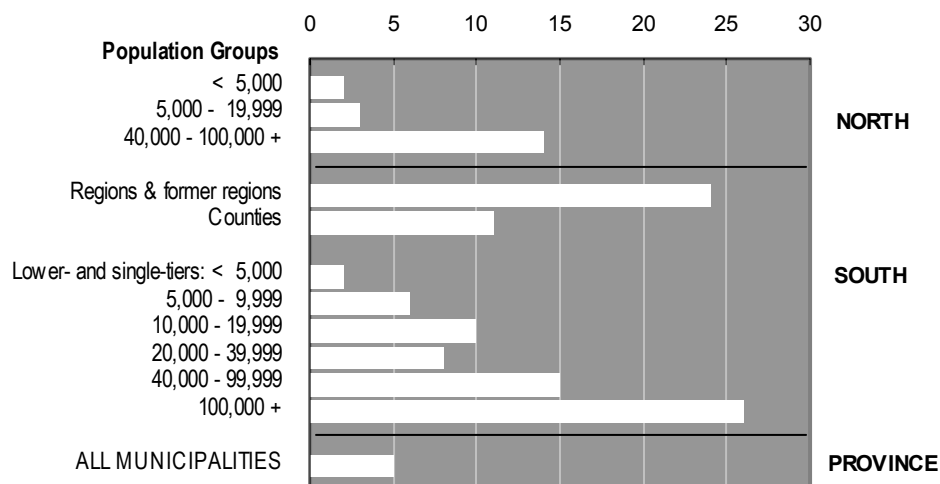
**Number of Complaints Received in a Year Concerning the
Collection of Garbage and Recycled Materials per 1,000 Households
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	0	2	9	0 to 122	70
5,000 – 19,999	1	3	17	0 to 19	10
40,000 – 100,000 +	11	14	17	11 to 17	3
SOUTH					
Regions & former regions	15	24	30	0 to 48	10
Counties	0	11	12	0 to 22	4
Lower- & single-tiers:					
< 5,000	0	2	6	0 to 80	53
5,000 – 9,999	1	6	18	0 to 63	53
10,000 – 19,999	3	10	24	0 to 106	45
20,000 – 39,999	2	8	12	0 to 53	16
40,000 – 99,999	5	15	38	1 to 280	12
100,000 +	8	26	33	0 to 62	8
ALL MUNICIPALITIES	0	5	17	0 to 280	284

FIR reference: SLC 92 3452 07.

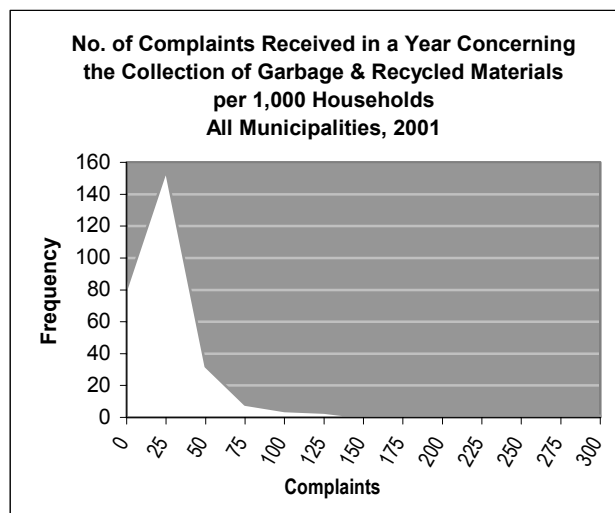
NOTES: All municipalities reporting the measure are included in the Summary.

**Number of Complaints Received in a Year Concerning the
Collection of Garbage and Recycled Materials per 1,000 Households
2001 (Median)**



Solid Waste Management: Effectiveness

Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.



Objectives

Municipal solid waste services do not have an adverse effect on environment.

Notes

Municipalities differ in the formality of tracking systems and the definition of complaints.

Complaints should not include public inquiries about service or comments on local government policy. Some municipalities identified types of complaints including missed waste, non-collected waste, messy dumpsters, snowbank issues. One municipality defined complaints as anything that required investigation and/or resolution by municipal staff.

Factors affecting results

Results are influenced by:

- Whether complaints are formally tracked or estimated.
- Whether system includes both phone and written complaints.
- Whether complaints are tracked separately from public inquiries.
- Whether municipality provides collection services or uses depot recycling only.
- Change in contractor or change in collection method.

Solid Waste Management: Effectiveness

Total number of solid waste management sites owned by municipality.

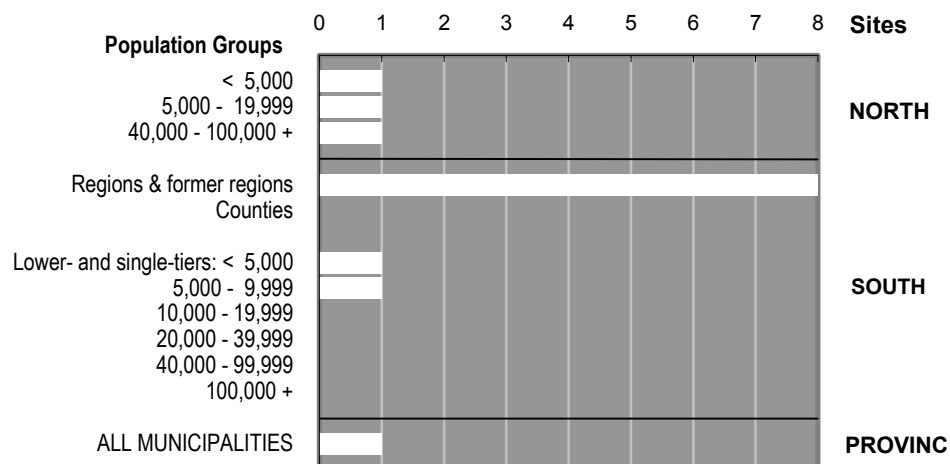
Total Number of Solid Waste Management Sites Owned by Municipality, 2001

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	#	#	#	#	#
NORTH					
< 5,000	0	1	1	0 to 5	110
5,000 – 19,999	0	1	2	0 to 3	13
40,000 – 100,000 +	1	1	2	1 to 2	3
SOUTH					
Regions & former regions	5	8	13	0 to 23	11
Counties	0	0	0	0 to 18	22
Lower- & single-tiers:					
< 5,000	0	1	3	0 to 9	66
5,000 – 9,999	0	1	2	0 to 5	65
10,000 – 19,999	0	0	1	0 to 9	62
20,000 – 39,999	0	0	0	0 to 4	21
40,000 – 99,999	0	0	1	0 to 42	17
100,000 +	0	0	4	0 to 36	15
ALL MUNICIPALITIES	0	1	2	0 to 42	405

FIR reference: SLC 92 3552 07.

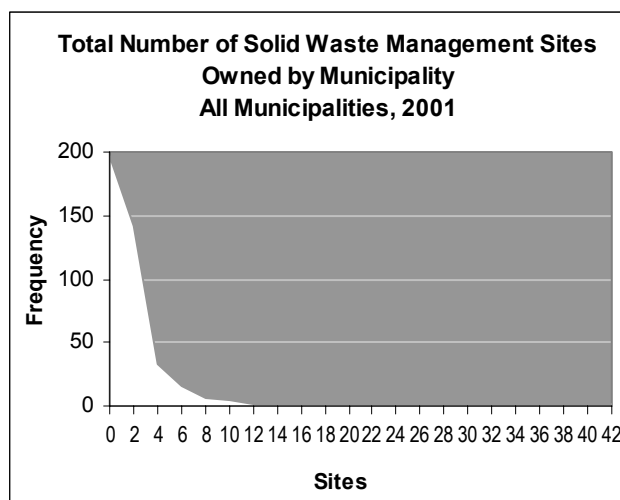
NOTES: All municipalities reporting this measure were included in the Summary.

Total Number of Solid Waste Management Sites Owned by Municipality, 2001 (Median)



Solid Waste Management: Effectiveness

Total number of solid waste management sites owned by municipality.

**Objective**

Municipal solid waste services do not have an adverse effect on environment.

Notes

This measure applies only to solid waste management facilities owned by the municipality. Of those municipalities reporting this measure, 197 reported no municipally owned solid waste management sites.

This measure provides a context to the number of sites and number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect.

Solid Waste Diversion: Effectiveness

Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by site.

Number of Days when an MOE Compliance Order for Remediation Concerning an Air or Groundwater Standard was in Effect for a Solid Waste Management Facility, by Site, 2001						
Population	Number of Municipalities by Number of Days Compliance Order was in Effect				Range Number of Days	Mun. Reporting Measure #
	0 to 25 Days	26 to 100 Days	101 to 200 Days	201 to 365 Days		
NORTH						
< 5,000	2	1			17 to 40	3
5,000 – 19,999						0
40,000 – 100,000 +						0
SOUTH						
Regions & former regions	1				1	1
Counties						
Lower- & single-tiers:						
< 5,000				1	365	1
5,000 – 9,999			1	1	135 to 242	2
10,000 – 19,999		1		2	5 to 365	3
20,000 – 39,999						0
40,000 – 99,999						0
100,000 +						0
ALL MUNICIPALITIES	2	3	1	4	1 to 365	10

FIR reference: SLC 92 3553 07 to SLC 92 3560 07.
Condition: Number of days is greater than 0.

NOTES: Measure refers only to municipally owned sites. Municipalities are counted only once, using the site with the highest number of days not in compliance. Only one municipality reported more than one site which was not in compliance with a remediation order.

Solid Waste Diversion: Effectiveness

Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by site.

Objectives

Municipal solid waste services do not have an adverse effect on environment.

Notes

This measure applies only to solid waste management sites owned by the municipality.

Only 10 municipalities reported a municipally owned solid waste management site which was not in compliance with a Ministry of Environment order for remediation for an air or groundwater standard. Therefore, a frequency distribution is not shown.

Solid Waste Diversion: Effectiveness

Percentage of residential solid waste diverted.

Total tonnes of residential solid waste diverted

Total tonnes of residential solid waste disposed of and total tonnes diverted

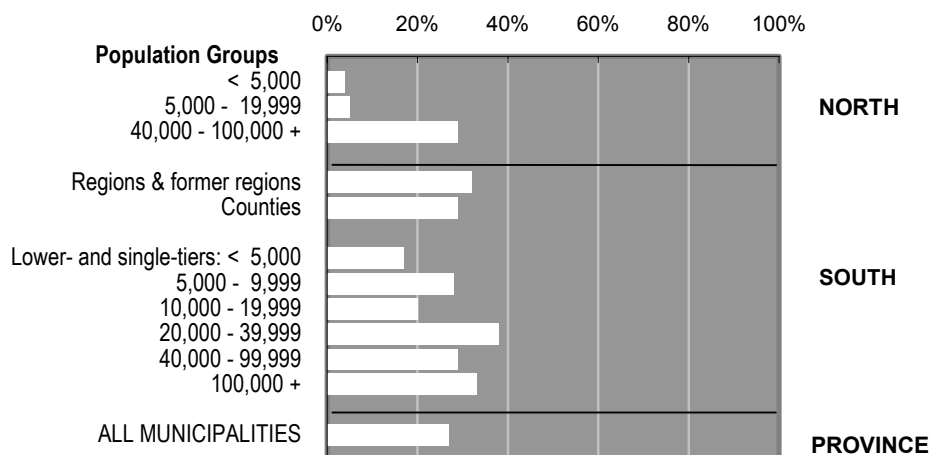
X 100

**Percentage of Residential Solid Waste Diverted
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	%	%	%	%	#
NORTH					
< 5,000	1%	4%	28%	0% to 42%	23
5,000 – 19,999		5%	10%	5% to 10%	2
40,000 – 100,000 +		29%	34%	29% to 34%	2
SOUTH					
Regions & former regions	28%	32%	34%	18% to 43%	9
Counties	18%	29%	44%	18% to 44%	3
Lower- & single-tiers:					
< 5,000	9%	17%	36%	0.4% to 68%	23
5,000 – 9,999	16%	28%	34%	4% to 77%	24
10,000 – 19,999	13%	20%	39%	2% to 56%	20
20,000 – 39,999	27%	38%	44%	26% to 45%	7
40,000 – 99,999	13%	29%	34%	7% to 48%	10
100,000 +	29%	33%	35%	10% to 39%	6
ALL MUNICIPALITIES	10%	27%	34%	0% to 77%	129

FIR reference: SLC 92 3655 07.

Condition: Result is less than 100%.

**Percentage of Residential Solid Waste Diverted
2001 (Median)**

Solid Waste Diversion: Effectiveness

Percentage of residential solid waste diverted
(based on combined residential and ICI tonnage).

Total tonnes of solid waste diverted from all property classes

Total tonnes of solid waste disposed of and total tonnes diverted
from all property classes

X 100

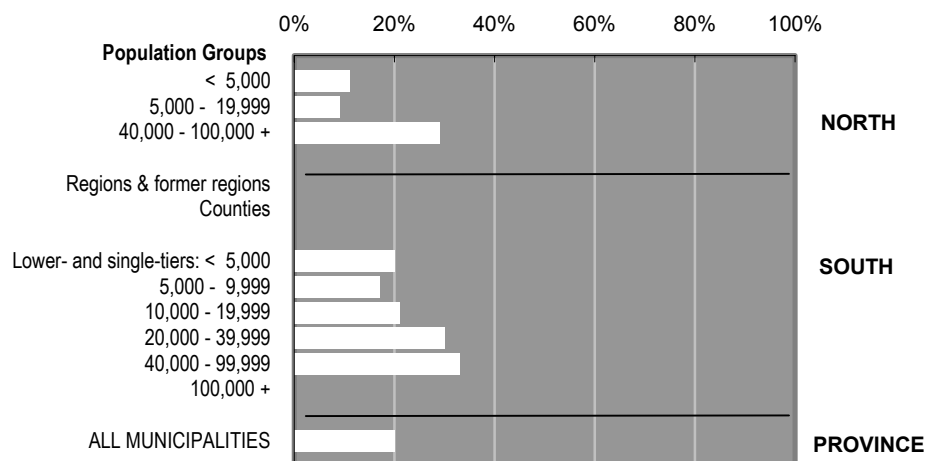
**Percentage of Residential Solid Waste Diverted
(Based on Combined Residential and ICI Tonnage)
2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure #
	%	%	%	%	
NORTH					
< 5,000	11%	11%	14%	11% to 16%	4
5,000 – 19,999	7%	9%	13%	1% to 17%	5
40,000 – 100,000 +		29%		29%	1
SOUTH					
Regions & former regions					0
Counties					0
Lower- & single-tiers:					
< 5,000	16%	20%	30%	7% to 51%	10
5,000 – 9,999	13%	17%	22%	11% to 91%	13
10,000 – 19,999	18%	21%	27%	9% to 57%	12
20,000 – 39,999	28%	30%	37%	25% to 49%	5
40,000 – 99,999		33%	40%	33% to 40%	2
100,000 +					
ALL MUNICIPALITIES	13%	20%	29%	1% to 91%	52

FIR reference: SLC 92 3656 07.

NOTES: Municipalities were to complete only one effectiveness measure for diversion. Summary includes only those municipalities which did not report measure based solely on residential tonnage.

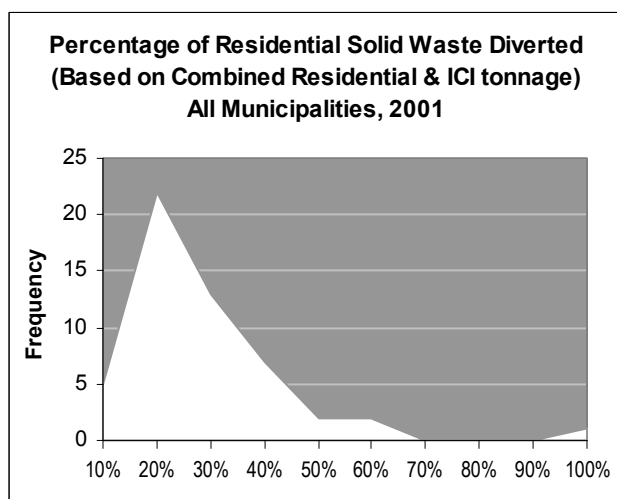
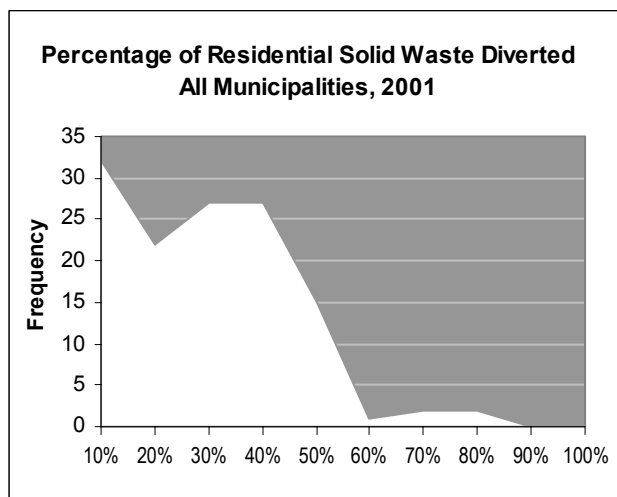
**Percentage of Residential Solid Waste Diverted
(Based on Combined Residential and ICI Tonnage)
2001 (Median)**



Solid Waste Diversion: Effectiveness

Percentage of residential solid waste diverted.

Percentage of residential solid waste diverted (based on combined residential and ICI tonnage).

**Objectives**

Municipal waste reduction programs divert waste from landfills and/or incinerators.

Notes

Municipalities were to complete only one effectiveness measure for solid waste diversion. If the municipality records residential tonnage separately it should report the measure: percentage of residential solid waste diverted. If the municipality does not record tonnage for residential solid waste separately from industrial, commercial, institutional (ICI) tonnage, it should report the measure: percentage of residential solid waste diverted (based on combined residential and ICI tonnage).

Many municipalities completed both measures, reporting the same results for each measure. It did not appear that municipalities were distinguishing residential tonnage from tonnage for all property classes. Therefore, municipalities completing both effectiveness measures for solid waste diversion were not included in the summary of results for the diversion measure based on combined residential and ICI tonnage.

A handful of municipalities reported residential diversion rates above 60%. These values are included in the range, but the municipalities involved should verify their results and provide explanatory notes.

Results will vary depending on the measure reported. If the combined tonnage measure is used, and residential diversion represents a relatively small proportion of total solid waste diverted, the diversion rate may be lower than a diversion rate based on residential tonnage only.

**Factors
affecting
results**

Results are influenced by:

- Whether the calculation of waste diversion is based on Generally Accepted Principles (GAP) developed by Corporations Supporting Recycling (CSR).
- Whether diverted waste is tracked by class.
- Whether scales are available at landfill sites and waste transfer facilities.
- Whether data is available for solid waste received at private waste transfer facilities.
- Whether residential tonnage for both disposal and diversion is weighed or estimated. (Some municipalities weigh the tonnage diverted, but estimate tonnage disposed of.)
- Number of materials included in recycling program (e.g. plastic, metal, glass, paper, hazardous waste, white goods, food waste).
- Method of collection, e.g. drop-off depots, recycling pick-up.
- Percentage of population receiving pick-up service.
- Frequency of pick-up service.
- Effort spent on promotion.

Location of New Development: Effectiveness

Percentage of new development with final approval which is located within settlement areas.

Number of new lots, blocks and/or units with final approval which are located within settlement areas

Total number of new lots, blocks and/or new units with final approval which are located within the entire municipality

X 100

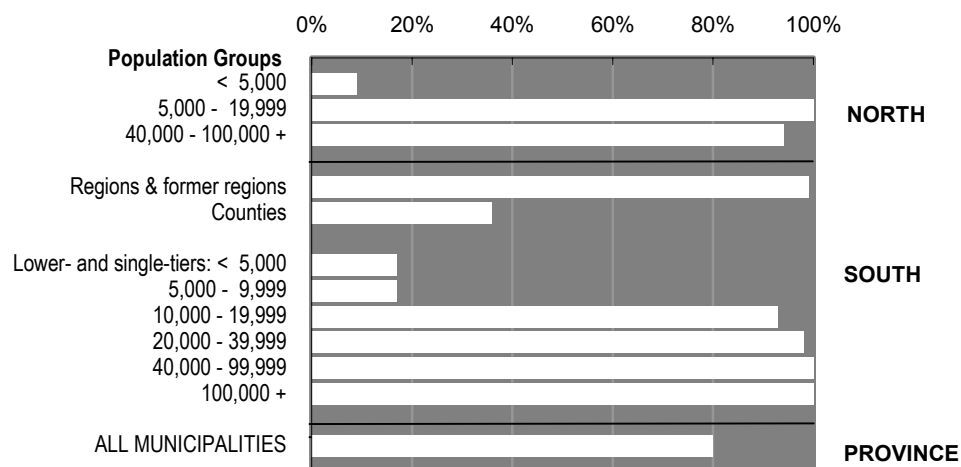
**Percentage of New Development with Final Approval
which is Located within Settlement Areas, 2001**

Population	25 th Percentile	50 th Percentile (Median)	75 th Percentile	Range	Mun. Reporting Measure
	%	%	%	%	#
NORTH					
< 5,000	0	9	100	0 to 100	39
5,000 – 19,999	20	100	100	0 to 100	9
40,000 – 100,000 +	75	94	100	75 to 100	3
SOUTH					
Regions & former regions	95	99	100	72 to 100	10
Counties	10	36	74	0 to 83	12
Lower- & single-tiers:					
< 5,000	0	17	100	0 to 100	31
5,000 – 9,999	9	17	100	0 to 100	51
10,000 – 19,999	56	93	100	0 to 100	49
20,000 – 39,999	80	98	100	0 to 100	18
40,000 – 99,999	96	100	100	48 to 100	17
100,000 +	100	100	100	87 to 100	14
ALL MUNICIPALITIES	11	80	100	0 to 100	253

FIR reference: SLC 92 8154 07.

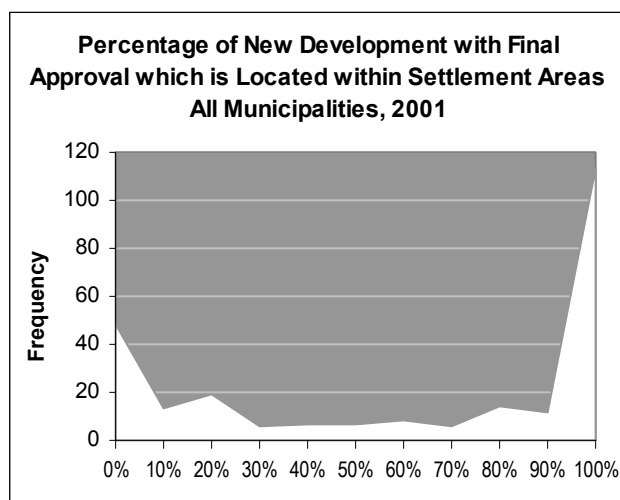
Note: All municipalities reporting the measure are included in the Summary.

**Percentage of New Development with Final Approval
which is Located within Settlement Areas, 2001 (Median)**



Location of New Development: effectiveness

Percentage of new development with final approval which is located within settlement areas.

**Objective**

New lot creation is occurring in settlement areas.

Notes

This measure was not completed if a municipality did not approve any lots, blocks or units in 2001.

Factors affecting results

Results are influenced by:

- Whether the municipality has an official plan.
- Whether the municipality has designated settlement areas.
- Availability of land for new development.
- Crown Land. For some municipalities, Crown Land may represent a significant proportion of land.
- Development not in settlement areas may be in compliance with official plan policies and Provincial Policy Statements.

Preservation of Agricultural Land: Effectiveness

Percentage of land designated for agricultural purposes which was preserved during 2001.

Percentage of land designated for agricultural purposes which was preserved relative to the base year of 2000.

Hectares of land designated for agricultural purposes in
the Official Plan as of December 31, 2001

Hectares of land designated for agricultural purposes in
the Official Plan as of January 1, 2001

Hectares of land designated for agricultural purposes in
the Official Plan as of December 31, 2001

Hectares of land designated for agricultural purposes in
the Official Plan as of January 1, 2000

Percentage of Land Designated for Agricultural Purposes which was Preserved

Population	% of Land Preserved During 2001	% of Land Preserved Relative to 2000	Range: Preservation During 2001	Range: Preservation Relative to 2000	Mun. Reporting Measure: During 2001	Mun. Reporting Measure: Relative to 2000
	%	%	%	%	#	#
NORTH						
< 5,000	100%	100%	99% to 100%	99% to 100%	18	18
5,000 – 19,999	100%	100%	96% to 100%	96% to 100%	4	4
40,000 – 100,000 +	100%	100%	100%	100%	1	1
SOUTH						
Regions & former regions	100%	100%	98% to 100%	98% to 100%	9	9
Counties	100%	100%	100%	100%	8	8
Lower- & single-tiers:						
< 5,000	100%	100%	100%	98% to 100%	19	19
5,000 – 9,999	100%	100%	96% to 105%	96% to 105%	39	38
10,000 – 19,999	100%	100%	99% to 100%	80% to 119%	45	43
20,000 – 39,999	100%	100%	100%	100% to 108%	16	16
40,000 – 99,999	100%	100%	75% to 100%	75% to 100%	14	14
100,000 +	100%	100%	77% to 100%	77% to 100%	12	12
ALL MUNICIPALITIES	100%	100%	75% to 105%	75% to 119%	185	182

FIR references:

SLC 92 8163 07 (Preservation in reporting year).

SLC 92 8164 07 (Preservation relative to base year of 2000).

Condition: Result is greater than 0.

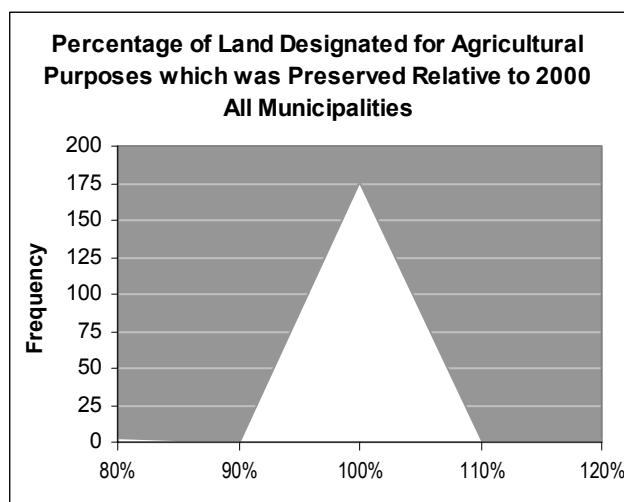
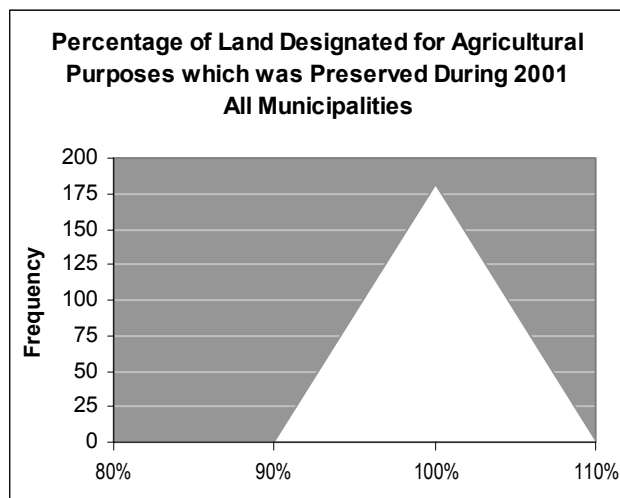
NOTES:

- One municipality reported 0% land preserved during 2001 due to a boundary adjustment. Two municipalities reported 0% land preserved since 2000. Where notes were provided, the result was due to a boundary adjustment.
- One municipality reported preserving over 100% of land designated for agricultural purposes in 2001. Three municipalities reporting preserving over 100% of land designated for agricultural purposes since 2000. Reasons given were boundary adjustments and an improved system for measuring hectares.
- Since the median result is 100% for all groups for both measures, the results are not graphed.

Preservation of Agricultural Land: Effectiveness

Percentage of land designated for agricultural purposes which was preserved during 2001.

Percentage of land designated for agricultural purposes which was preserved relative to the base year of 2000.



Objective

Preservation of agricultural land.

Factors affecting results

Results are influenced by:

- Whether there is an official plan.
- Changes to Official Plan or adoption of new Official Plan.
- Agricultural land is not a separate class in the Official Plan.
- Municipality does not have an inventory of agricultural land.
- Annexation, amalgamation.
- Demand for new development.

- Building of new roads and widening of roads.
- Geographic Information System (GIS) data leads to changes in the number of hectares.

Preservation of Agricultural Land: Effectiveness

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during 2001.

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.

Number of Hectares of Land Originally Designated for Agricultural Purposes which was Re-designated for Other Uses

Population	Hectares Re-designated During 2001	Hectares Re-designated Since 2000	Range: Re-designated During 2001	Range: Re-designated Since 2000	Mun. Reporting Measure: Re-designated During 2001	Mun. Reporting Measure: Re-designated Since 2000
	#	#	#	#	#	#
NORTH						
< 5,000	0	0	0 to 12	0 to 12	18	18
5,000 – 19,999	0	0	0 to 92	0 to 92	4	4
40,000 – 100,000 +	0	0	0	0	1	1
SOUTH						
Regions & former regions	6	88	0 to 1,024	0 to 1,037	9	9
Counties	0	0	0 to 191	0 to 186	8	8
Lower- & single-tiers:						
< 5,000	0	0	0 to 3	0 to 471	19	19
5,000 – 9,999	0	0	-204 to 80	-204 to 118	39	38
10,000 – 19,999	0	0	0 to 109	-1,710 to 151	45	43
20,000 – 39,999	0	0	0 to 141	-5,235 to 88	16	16
40,000 – 99,999	0	0	0 to 2,503	0 to 2,528	14	14
100,000 +	0	0	0 to 1,024	0 to 1,037	12	12
ALL MUNICIPALITIES	0	0	-204 to 2,503	-5,235 to 2,528	185	182

FIR references:

SLC 92 8165 07 (Hectares re-designated in 2001).

SLC 92 8166 07 (Hectares re-designated since 2000).

Conditions: Municipalities were excluded if they reported boundary changes which affected total hectares.

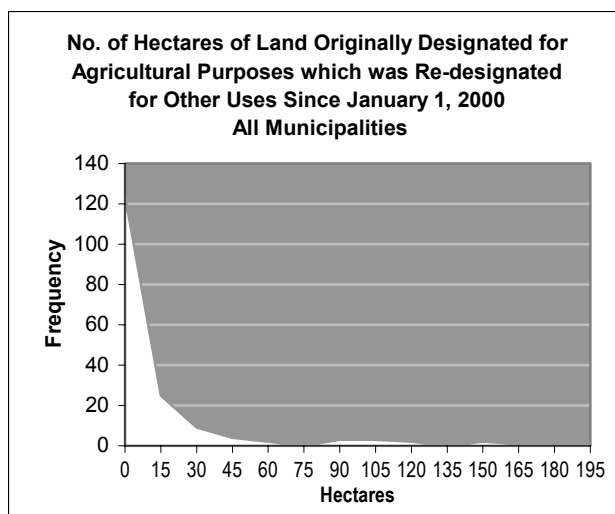
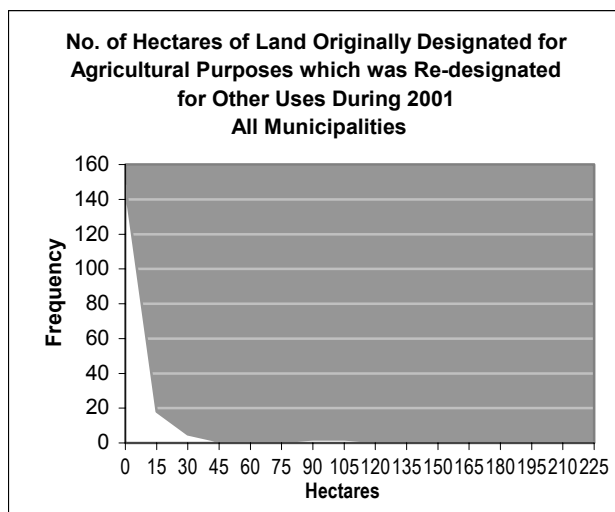
NOTES:

- One municipality reported a negative value for the number of re-designated hectares during 2001 because the percentage of land designated for agricultural purposes which was preserved exceeded 100% due to Official Plan changes.
- Three municipalities reported a negative value for the number of re-designated hectares since 2000 because the percentage of land designated for agricultural purposes which was preserved exceeded 100% due to changes in the Official Plan or changes in the method of calculating hectares.

Change in Number of Designated Hectares: Effectiveness

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during 2001.

Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.



Objective

Preservation of agricultural land.

Notes

In order to better communicate how results are distributed for most municipalities, the frequency distribution for hectares re-designated in 2001 does not include 3 results above 1,000 hectares. Similarly, the frequency distribution for hectares re-designated since 2000 does not include 6 results above 500 hectares.

**Factors
affecting
results**

While the measure for the preservation of agricultural land represents the percentage of land preserved, this measure provides the number of hectares that were re-designated. The factors affecting the measure are therefore identical to the preservation measure.

2001 Ontario Municipal Performance Measures			
Service	Type of measure	Description of Measure	Schedule, line, column in 2001 Financial Information Return
General government	efficiency	General government support as a percentage of total municipal operating costs.	91 0202 13
	efficiency	Governance and corporate management as a percentage of total municipal operating costs.	91 0203 13
Protection Services			
Fire services	efficiency	Operating costs for fire services per \$1,000 of property assessment.	91 1101 13
Police services	efficiency	Operating costs for police services per household.	91 1202 13
	effectiveness	Violent crime rate per 1,000 persons or per 100,000 persons.	92 1258 07
	effectiveness	Property crime rate per 1,000 persons or per 100,000 persons.	92 1259 07
Roadways			
Roads	efficiency	Operating costs for paved (hard top) roads per lane kilometre.	91 2103 13
	efficiency	Operating costs for unpaved (loose top) roads per lane kilometre.	91 2104 13
	effectiveness	Percentage of paved lane kilometres where the condition is rated as good to very good.	92 2152 07
Winter control	efficiency	Operating costs for winter control maintenance of roadways per lane kilometre.	91 2202 13
	effectiveness	Percentage of winter event responses that met or exceeded municipal road maintenance standards.	92 2251 07
Conventional transit	efficiency	Operating costs for conventional transit per regular service passenger trip.	91 2301 13
	effectiveness	Number of conventional transit passenger trips per person in the service area in a year.	92 2351 07
Environmental Services			
Wastewater	efficiency	Operating costs for the collection of wastewater per kilometre of wastewater main.	91 3103 13
	efficiency	Operating costs for the treatment and disposal of wastewater per megalitre.	91 3104 13
	efficiency	Operating costs for the collection, treatment and disposal of wastewater per megalitre (Integrated System).	91 3105 13
	effectiveness	Number of wastewater main backups per 100 kilometres of wastewater main in a year.	92 3154 07
	effectiveness	Percentage of wastewater estimated to have by-passed treatment.	92 3155 07

2001 Ontario Municipal Performance Measures

Service	Type of measure	Description of Measure	Schedule, line, column in 2001 Financial Information Return
Environmental Services			
Drinking water	efficiency	Operating costs for the treatment of drinking quality water per megalitre.	91 3303 13
	efficiency	Operating costs for the distribution of drinking quality water per kilometre of water distribution pipe.	91 3304 13
	efficiency	Operating costs for the treatment and distribution of drinking quality water per megalitre (Integrated System).	91 3305 13
	effectiveness	Weighted number of days when a boil water advisory issued by the Medical Officer of Health, applicable to a municipal water supply, was in effect.	92 3355 07
	effectiveness	Number of breaks in water mains per 100 kilometres of water main pipe in a year.	92 3356 07
Solid waste	efficiency	Operating costs for garbage collection per tonne or per household.	91 3402 13
	efficiency	Operating costs for garbage disposal per tonne or per household.	91 3502 13
	efficiency	Operating costs for solid waste diversion (recycling) per tonne or per household.	91 3602 13
	efficiency	Average operating costs for solid waste management (collection, disposal and diversion) per tonne or per household.	91 3603 13
	effectiveness	Number of complaints received in a year concerning the collection of garbage and recycled materials per 1,000 households.	92 3452 07
	effectiveness	Total number of solid waste management sites owned by municipality.	92 3552 07
	effectiveness	Number of days per year when a Ministry of Environment compliance order for remediation concerning an air or groundwater standard was in effect for a solid waste management facility, by site.	92 3553 03 to 92 3560 03 92 3553 07 to 92 3560 07
	effectiveness	Percentage of residential solid waste diverted.	92 3655 07
	effectiveness	Percentage of residential solid waste diverted (based on combined residential and ICI tonnage).	92 3656 07

2001 Ontario Municipal Performance Measures			
Service	Type of measure	Description of Measure	Schedule, line, column in 2001 Financial Information Return
Land use planning	effectiveness	Percentage of new development with final approval which is located within settlement areas.	92 8154 07
	effectiveness	Percentage of land designated for agricultural purposes which was preserved during 2001.	92 8163 07
	effectiveness	Percentage of land designated for agricultural purposes which was preserved relative to the base year of 2000.	92 8164 07
	effectiveness	Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses during 2001.	92 8165 07
	effectiveness	Number of hectares of land originally designated for agricultural purposes which was re-designated for other uses since January 1, 2000.	92 8166 07
Measures not included in Summary			
Due to problems with definitions the following measures were not included.			
Police	effectiveness	Youth crime rate per 1,000 or per 100,000 persons.	92 1260 07
	effectiveness	Total crime rate (Criminal Code, excluding traffic) per 1,000 or per 100,000 persons.	92 1261 07

List of Web Sites

The following web sites contain useful supplementary information.

Ministry of Municipal Affairs

Visit the home page of the Ministry of Municipal Affairs and click on “Municipal Performance Measurement Program” for information on the program.
Includes archives.

www.mah.gov.on.ca

Association of Municipal Managers, Clerks and Treasurers of Ontario

AMCTO serves those in professions directly related to municipal government. AMCTO promotes expertise relevant to the skills, knowledge and teamwork required to foster administrative excellence in municipal government.

www.amcto.com

Association of Municipalities of Ontario (AMO)

The Association of Municipalities of Ontario (AMO) works with and for municipal governments. AMO's traditional activities include inter-government relations and policy development, information gathering and disseminating on all issues affecting municipalities.

www.amo.on.ca

Click “More on AMO” and “Ontario Municipalities” for a list of municipalities by region, county and district.

Corporations Supporting Recycling (CSR)

CSR is a Canadian, not-for-profit, private sector organization that works with all levels of government, particularly municipalities, as well as non-government organizations and other industry groups to help develop sustainable municipal recycling and waste diversion systems.

Click on “GAP” for generally accepted principles. These principles were used to measure municipal waste flow for the solid waste performance measures.

www.csr.org

Municipal Finance Officers Association of Ontario (MFOA)

MFOA is the professional association of municipal finance officers in the Province of Ontario. MFOA promotes the interests of its members in carrying out their statutory and other financial responsibilities by initiating studies and sponsoring seminars to review, discuss and develop positions on important policy and financial management issues.

www.mfoa.on.ca

Ontario Centre for Municipal Best Practices (OCMBP)

The Ontario Centre for Municipal Best Practices is a partnership, formed in 2002, between the Association of Municipalities of Ontario and the Ontario Ministry of Municipal Affairs. It is developing a virtual electronic library of municipal best practices.

<http://www.municipalbestpractices.ca/home.asp>

Ontario Good Roads Association (OGRA)

The Ontario Good Roads Association represents the transportation and public works-related concerns of all municipalities and many of the First Nations communities of Ontario. For over 100 years, this association has aided municipalities in their efforts to provide efficient and effective transportation systems.

www.ogra.org

Ontario Municipal CAO's Benchmarking Initiative (OMBI)

The Ontario Municipal CAO's Benchmarking Initiative is a partnership project to push for service excellence in municipal government. Participating municipalities are working together to identify and share performance statistics, operational best practices and to network in a spirit of innovation and entrepreneurship to push for even greater successes.

www.ombi.ca

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Existe en français
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