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**Joint Evaluation of the Canada-Association of Municipalities of Ontario
Federal Gas Tax Fund
and
Federal Public Transit Fund
- Integrated Final Report -**

Submitted to:

Association of Municipalities of Ontario

Submitted by:

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Joint Evaluation of the Canada-AMO Federal Gas Tax Fund and Federal Public Transit Fund – Integrated Final Report

List of Acronyms

AMO	Association of Municipalities of Ontario
CFDC	Community Futures Development Corporation
CIP	Capital Investment Plan
COMRIF	Canada-Ontario Municipal Rural Infrastructure Fund
ESMI	Environmentally Sustainable Municipal Infrastructure
GHG	Greenhouse Gas
GTF	Gas Tax Fund
HOV	High Occupancy Vehicle
HVAC	Heating, Ventilating and Air Conditioning
ICSP	Integrated Community Sustainability Plan
INFC	Infrastructure Canada
ITS	Intelligent Transport System
OP	Official Plan
PTF	Public Transit Fund

Executive Summary

Introduction

This study involved the conduct of a joint evaluation of the Gas Tax Fund (GTF) and Public Transit Fund (PTF) in Ontario excluding the City of Toronto, as administered by the Association of Municipalities of Ontario (AMO). The purpose of the joint evaluation is to report on the progress of the GTF and PTF towards their final outcomes to date and cost-effectiveness. It also intends to recommend on adjustments that should be made to ensure the success of the GTF program for its extension.

The Canada-Ontario-AMO-City of Toronto Agreement for the GTF was signed June 17, 2005. Under this agreement, AMO administers GTF funding for 443 municipalities. The funding is entitlement based and disbursed on a per capita basis using the 2001 Population Census data from Statistics Canada. This does not include the City of Toronto which works directly with Infrastructure Canada. The Province of Ontario administers the portion of the GTF allocated to unincorporated communities, but has no role in the delivery of the AMO administered funding program.

The Canada-Ontario-AMO-City of Toronto Agreement for the PTF was signed March 30, 2006. Under this agreement, AMO administers PTF funding for 78 municipalities that provide transit service. The funding is disbursed on the basis of 2004 ridership data produced by the Canadian Urban Transit Association. This again does not include the City of Toronto which works directly with Infrastructure Canada. As for the GTF, the Province of Ontario has no role in the delivery of PTF funding.

Evaluation Methodology

The evaluation addressed the general evaluation issues progress or success and cost-effectiveness. More precisely it was intended to address the following general questions:

- < What is the success / progress achieved to date? Are there any indicators that the programs are encountering problems that prevent them from meeting their objectives, within budget and without unwanted outcomes?
- < Are the most appropriate and efficient means being used to achieve objectives.

In order to address these issues, the evaluation relied extensively on multiple lines of evidence. The approaches used were both qualitative and quantitative in nature and included a document / literature review, a review of administrative data, 26 in-depth interviews with stakeholders from the Canada, Ontario and municipal orders of government and AMO, a survey of 150 officials from municipalities that received GTF and / or PTF funding (Upper Tier, Lower Tier and Single Tier municipalities) and four case studies.

All reasonable efforts were used to ensure the valuation methodology was robust. This included the use of multiple lines of evidence, reliable sample sizes, random sampling where appropriate, and coverage across all areas of the programs.

More information on the methodology is provided in Section 2.0 of the report.

Profile of the GTF and PTF

Gas Tax Fund

The GTF was made available, for the benefit of municipalities, to ensure long-term financial commitments needed to help contain urban sprawl and to invest in new sustainable infrastructure projects in areas such as transit, water and sewers. Gas tax funding is shared with communities so that they can plan for and build environmentally sustainable municipal infrastructure.

The portion of the Canada-Ontario-AMO-City of Toronto Agreement which is administered by AMO includes 443 municipal governments and excludes the City of Toronto. For fiscal year 2005-06 to 2009-10, the GTF funding allocations to Ontario municipalities excluding Toronto total \$1.438 billion. As of December 31, 2007, a little over one thousand projects had been initiated totalling more than \$375 million in GTF funding and close to \$2 billion in total infrastructure project spending.

Public Transit Fund

The PTF is designed to contribute to the Government of Canada's environmental objectives through targeted support for public transit infrastructure in Canadian communities.

The portion of the Canada-Ontario-AMO-City of Toronto Agreement which is administered by AMO includes 78 municipalities that provide transit services. AMO is delivering \$56.743 million in one-time PTF federal funding for eligible Ontario municipalities excluding the City of Toronto. For the period up to December 31, 2007, 45 projects had been initiated totalling close to \$35.5 million in PTF funding and more than \$275 million in total transit infrastructure project spending.

More information on the profiles of the two programs is provided in Section 3.0 of the report.

Key Conclusions – Success / Progress

Conclusion 1

There is a high level of satisfaction with the GTF with respect to the process for negotiating the Agreement, project categories and eligibility criteria, as well as with the role of the AMO in the administration of the fund. However, smaller municipalities are less satisfied with some of the reporting requirements, in particular the annual audit statement requirements.

For the detailed findings related to this conclusion, please refer to Section 4.1 of the report.

Conclusion 2

Although funding available through the PTF was appreciated, there was less satisfaction with the PTF due to its limited one time availability and disappointment that it has not been continued.

As this was one-time funding, no recommendation is required.

For the detailed findings related to this conclusion, please refer to Section 4.1 of the report.

Conclusion 3

In Ontario, more than 1,000 green infrastructure projects have been funded through the GTF and PTF since the programs began. These projects have significantly contributed to new and improved municipal infrastructure such as roads, bridges, street lighting, furnaces, buses, and many others. In the majority of cases, projects have demonstrated expected results. There has been a good alignment between the projects selected, program categories and benefits. The needs of municipalities have, to a fair extent, been met through the existing program categories. Nonetheless, some would like to see recreational and other types of infrastructure included in the eligible project categories.

For the detailed findings related to this conclusion, please refer to Section 4.2 and Section 4.5 of the report.

Conclusion 4

Only a portion of the GTF and PTF projects undertaken have been completed. Nevertheless, the majority of completed projects have resulted in environmentally sustainable municipal infrastructure. However, a significant proportion of the projects undertaken were in the local roads and bridges category. While there is some evidence of environmental benefits resulting from these types of projects, other project categories are better aligned with environmental benefits. Environmental monitoring for roads and bridges is not required as is the case in other project categories.

For the detailed findings related to this conclusion, please refer to Section 4.3 of the report.

Conclusion 5

A requirement for municipal plans is incorporated into the Agreements for the GTF and PTF. AMO has also taken steps to provide guidance to municipalities in the development and enhancement of Integrated Community Sustainability Plans. The predictability of the GTF funding has improved the ability and confidence of municipalities to establish longer term capital plans and set priorities for addressing infrastructure needs. In terms of specific projects, there have been a limited number that fall within the category of capacity building. The nature of

these projects is varied and includes projects such as asset management systems, environmental assessments and official plans.

For the detailed findings related to this conclusion, please refer to Section 4.4 and 4.8 of the report.

Conclusion 6

The PTF helped municipalities advance projects identified within transit plans. Para transit and rolling stock were identified as the most important needs. Given that the PTF was one-time funding, there are significant transit needs that were not met under this program, but this is not due to the lack of flexibility of the program. Nevertheless, the PTF contributed to long-term sustainability planning due to the requirement for eligible communities to submit a comprehensive transit strategy and a 10-year Transit Asset Management Plan.

For the detailed findings related to this conclusion, please refer to Section 4.6 of the report.

Conclusion 7

Since there is a built-in requirement in the Agreements for both the GTF and PTF to produce incremental capital spending on municipal infrastructure, it is not surprising that the programs have resulted in incremental capital spending. This incremental spending has originated from all orders of government. On average, an additional \$3.75 has been provided by other sources of funding for every \$1.00 of GTF funding. Similarly, the amount is \$4.00 for every \$1.00 of PTF funding.

At the project level, if the GTF and PTF had not been available, the vast majority of municipalities would either not have undertaken some or all of these projects or the projects would have been delayed or scaled back in terms of scope and / or quality.

For the detailed findings related to this conclusion, please refer to Section 4.7 of the report.

Conclusion 8

The GTF and PTF have contributed to meeting provincial and municipal objectives related to overcoming the outstanding infrastructure deficit by: infusing the capital needed to enable more timely completion of infrastructure projects; demonstrating that municipalities can use federal funding in a cost-effective and accountable way; providing flexibility in terms and conditions; and enhancing existing planning processes.

For the detailed findings related to this conclusion, please refer to Section 4.9 of the report.

Conclusion 9

The GTF fostered collaborative approaches across the orders of government. In particular it helped to strengthen new relationships between the federal and municipal orders. The agreement itself was developed in a collaborative way with Infrastructure Canada, Ontario, AMO and the City of Toronto participating in the process. The province was at the table, but not to negotiate on behalf of municipalities. Collaboration is evident in the governance structure of the program as well as in decisions that have been made with respect to communication plans, planning and reporting approaches and the development of outcomes indicators. There was also collaborative engagement of various funding partners in undertaking a significant number of municipal infrastructure projects.

For the detailed findings related to this conclusion, please refer to Section 4.10 of the report.

Conclusion 10

The GTF and PTF have demonstrated significant benefits with very few adverse effects. The programs have demonstrated that it is both positive and desirable to have federal / municipal relationships. Municipal actions align with national priorities in areas such as infrastructure and sustainability. Due to the fact that the GTF funding allocation formula is based on population, the smaller municipalities receive much more limited funds. Concern has been expressed that funding to the smaller municipalities is not enough due to large geographic areas, and in some cases, high seasonal populations. A capacity challenge for some smaller communities lies in meeting the reporting and audit requirements.

For the detailed findings related to this conclusion, please refer to Section 4.11 of the report.

Recommendations – Success / Progress

Based on the conclusions related to the success / progress of the GTF and PTF, the following recommendations are being brought forth.

Recommendation 1

Due consideration should be given to risk-based audit requirements. Given the cost of preparing annual audited financial statements and since the financial risks associated with misuse of funds in municipalities receiving limited financial support, audits could be required only for those municipalities who received a certain minimum amount of funding. If the risks associated with misuse of funding are nonetheless deemed unacceptable, less frequent audits could be required of smaller communities.

Recommendation 2

The GTF should continue to offer a wide range of potential project categories, particularly in light of the fact that the municipal projects are achieving the intended results and benefits. Notwithstanding the possible overlap with other existing programs, consideration should be

given to adding other types of infrastructure, provided the project results are well aligned with program objectives.

Recommendation 3

Given the pressing needs of municipalities, it is important that the GTF continue to support projects in the local roads and bridges category. However, consideration could be given to limiting the proportion of GTF funding going to local roads and bridges projects to ensure municipalities invest funds in projects that make significant contributions to environmental benefits.

Recommendation 4

There should continue to be a requirement for projects undertaken under the GTF to be incremental capital spending on municipal infrastructure. AMO should monitor the amount of capital spending undertaken by municipalities in Ontario to ensure that the incrementality requirement continues to be met as it will become more difficult to assess this once the program has been in place for several years.

Recommendation 5

AMO and Infrastructure Canada should review the possibility of establishing a base funding amount over and above the per capita funding allocation to more adequately address the municipal infrastructure needs of smaller and rural municipalities.

Recommendation 6

AMO and Infrastructure Canada should update its per capita funding formula regularly to reflect more recent population data.

Recommendation 7

As per recommendation 1, AMO and Infrastructure Canada should review the requirement for independent compliance audit for funds under a certain threshold and consider using a certified sign-off by the municipal treasurer for smaller funding allocations.

Key Conclusions – Cost-Effectiveness

Conclusion 11

AMO's program management and control of the GTF and PTF funds has been very cost-effective.

For the detailed findings related to this conclusion, please refer to Section 5.1.1 of the report.

Conclusion 12

The funding allocation and delivery mechanisms are cost effective due to very low administrative costs associated with the GTF (1%) and PTF (1.7%).

However, the cost of compliance audits is an issue for some smaller municipalities. There are also concerns about the burden caused by the need to report on outcomes.

There is also some concern with the per capita funding formula for the GTF which is problematic for smaller municipalities.

Additionally, there is some concern that the inability to use municipal employees on projects without prior approval from the Oversight Committee makes it more difficult for municipalities to effectively make use of this option and leads to a less cost-effective approach.

For the detailed findings related to this conclusion, please refer to Section 5.1.2 of the report.

Recommendations – Cost-Effectiveness

Based on the conclusions related to the cost-effectiveness of the GTF and PTF, the following recommendations are being brought forth.

Recommendation 8

AMO's program management and control process should be used as a model for future programming.

Recommendation 9

AMO and Infrastructure Canada should review the terms and conditions relating to the use of municipal employees to perform work on infrastructure projects where it may be more cost-effective to do so. It may be more effective to include clear guidelines on when and how municipal employees can be used rather than requiring prior approval from the Oversight Committee.

Recommendations – General

In addition to the recommendations presented above which are linked to a specific conclusion, the following recommendation is of a more general nature:

Recommendation 10

AMO should be commended for its effort in obtaining outcomes data from municipalities on completed projects. However, AMO should ensure that its outcomes reporting requirements do not unduly affect the decisions of municipalities to undertake certain types of projects to the

detriment of other priorities because reporting is easier. AMO should therefore review the outcome reporting requirements to ensure that they provide the required information at the lowest cost to the municipalities. AMO should also put in place a mechanism for ensuring that only those fields which are applicable to the project are completed by municipalities.

1.0 Introduction

1.1 Purpose of Evaluation

This report presents the findings, conclusions and recommendations of the Joint Evaluation of the Gas Tax Fund (GTF) and Public Transit Fund (PTF) as administered by the Association of Municipalities of Ontario (AMO) for all municipalities in Ontario except Toronto.

Infrastructure Canada developed a core evaluation framework for the GTF and PTF in consultation with the initial recipients in each jurisdiction (provinces and territories, municipal associations and the City of Toronto). Each signatory was required to conduct a separate evaluation of the programs and submit its report to Infrastructure Canada who will be responsible for the integration of the findings of all evaluations into one national summative evaluation report.

The evaluation assessed the success or progress of the programs in reaching objectives as well as their cost-effectiveness.

1.2 Report Structure

This report is structured as follows:

- < Section 2 provides an overview of the evaluation methodology including how each approach addressed the issues, the use of multiple lines of evidence, and study limitations;
- < Section 3 provides a profile of the GTF and PTF in Ontario;
- < Section 4 presents key evaluation findings related to the progress or results of the GTF and PTF;
- < Section 5 presents the findings regarding the cost-effectiveness of the GTF and PTF in Ontario; and
- < Section 6 outlines the key evaluation conclusions and ensuing recommendations.

This report provides AMO management with the key findings, conclusions and actionable recommendations stemming from the evaluation and was structured to facilitate the preparation of the summative evaluation report by Infrastructure Canada.

2.0 Methodology

2.1 Evaluation Methodology

This evaluation addressed the following general evaluation issues:

- < **Progress / Success** – What is the success / progress achieved to date? Are there any indicators that the programs are encountering problems that prevent them from meeting their objectives, within budget and without unwanted outcomes?
- < **Cost-Effectiveness** – Are the most appropriate and efficient means being used to achieve objectives?

The detailed evaluation issues and indicators are provided in Annex A.

In order to address these issues, the evaluation relied extensively on multiple lines of evidence. The approaches used were both qualitative and quantitative in nature and included a document / literature review, a review of administrative data, in-depth interviews, a survey of ultimate recipients (Upper Tier, Lower Tier and Single Tier municipalities), and case studies. An overview of each approach is provided below.

The **document and literature review** comprised of program and other documents. These documents were provided by program management and other stakeholders, while other documents / literature were identified by the project team through web searches. The documents included miscellaneous background documents, agreements, guidelines and reports related to the program, documents pertaining to meetings / workshops, background papers, and others. These documents provided specific evidence for the issues related to progress / success and cost-effectiveness. The detailed findings from the document and literature review were provided in a separate technical report.

The **review of administrative data** examined the data on specific projects that is captured in the Annual Expenditure Reports, on overall program expenditures, on project outcomes for completed projects, as well as other program data. Given the nature of the information captured, the data contributed mostly to helping profile the program as well as to sampling for the surveys and case studies. It also provided specific evidence for both the success and cost-effectiveness issues. The detailed findings from the review of administrative data were provided in a separate technical report.

A total of 26 individuals participated in **in-depth interviews** between September 20 and October 28, 2008. Interviews were held with stakeholders from the Canada, Ontario and municipal orders of government and AMO. These included Infrastructure Canada (INFC) representatives, AMO representatives, Oversight Committee members and other key stakeholders. It should be noted that most stakeholders represented more than one “stake” in the programs. For example, the INFC and AMO representatives are also

involved in the Oversight Committee or Technical Sub-Committee. As such, rather than using different interview guides for different groups, a single interview guide with sections that apply to certain interviewees was used. The interviews were conducted by phone and took between 20 minutes and one hour to complete. As was expected, there was more feedback from interviewees on the GTF than the PTF. Some interviewees were not familiar with the PTF as their municipal organizations did not qualify for funding through this program. The detailed findings from the in-depth interviews were provided in a separate technical report.

A **telephone survey** was undertaken with a random sample of officials from 150 municipalities that received GTF and / or PTF funding (ultimate recipients). The survey was approximately 20 to 30 minutes in length and was completed at a time that was most convenient for the respondent and in his / her language of choice. Overall, the survey sample was representative of the total universe of ultimate recipients on key profile features. The survey addressed issues of success and cost-effectiveness for both the GTF and PTF. However, a small number of those surveyed had received PTF funding and those results are therefore less reliable. The detailed survey findings were provided in a separate technical report.

Four **case studies** were completed, chosen to include a variety of types of municipalities, regions and projects. The case studies included 39 projects covering all of the categories funded through the GTF as well as the PTF. Each case study involved a review of the documents and data available on the projects as well as interviews with municipal representatives. The draft case study write-ups were forwarded to the key project contact(s) for review and validation. The detailed findings from the case studies were provided in a separate technical report.

2.2 Strengths and Weaknesses

As outlined in the previous section, all reasonable efforts were used to ensure the evaluation methodology was robust. This included the use of multiple lines of evidence, reliable sample sizes, random sampling where appropriate, and coverage across all areas of the programs. However, there are limitations with all evaluation studies. In the case of this evaluation, the key limitations were associated with the individual methodological approaches. Limitations are as per Table 1.

Table 1: Study Limitations

Approach	Limitations
Document and Literature Review	The documents and literature were identified by AMO, interviewees and the consultants. As such, a wealth of documents on the programs and their environment was reviewed. However, there is no assurance that all key documents were identified and reviewed.

Table 1: Study Limitations

Approach	Limitations
Review of Administrative Data	<p>The administrative data on the GTF and PTF included several databases. The first was a database on the municipalities and their funding allocations. The second was a database on the specific projects undertaken by the municipalities since the start of the programs. The project team combined the two databases to include all information by municipality. Finally, the outcomes database was also included in the review.</p> <p>Analysis of the first two databases did not result in any key limitations as the information is verified and audited. Therefore, the data was deemed to be accurate, complete and reliable.</p> <p>On the other hand, the outcomes database had limitations. The outcomes data is entered by the individual municipalities when projects are completed. However, there is no mechanism in place to ensure that the data is complete and error free. For example, all not applicable outcomes are initiated at “0” yet there are legitimate “0” responses. It is therefore not possible to remove all zeros from the analysis but the not applicable zeros reduce the averages therefore making some of the results appear less positive than they are in actual fact. On the other hand, some of the figures provided by the municipalities appear ambitious. The outcomes data was therefore used with caution.</p>
In-Depth Interviews	<p>The in-depth interviews provided a wealth of qualitative information on various aspects of the programs. Some interviewees had an in-depth knowledge of the programs whereas others had in-depth knowledge of only particular aspects of the program or only the GTF. Therefore, some interviewees could only provide limited information on some evaluation issues. Nonetheless, almost all individuals identified as potential interviewees were interviewed. Additionally, the in-depth interviews contributed to providing good coverage of all applicable issues.</p>
Survey of Ultimate Recipients	<p>The survey of ultimate recipients provided an excellent means of obtaining quantitative information on a range of issues, in particular those related to the program’s success. However, the survey provided limited qualitative information. The survey also did not provide any means of validating the information provided by the recipients. For example, if a recipient noted that a project had resulted in an increase of x% in ridership, it was not within the scope of this evaluation to verify how the ultimate recipient had obtained this information or if the reported number was valid.</p>
Case Studies	<p>The case studies provided an excellent means of examining the impacts of the programs on specific municipalities. It provided information on projects from a wide range of perspectives. However, a limited number of cases could be completed in the context of this study. The cases are therefore not representative of all municipalities in Ontario, but rather provide qualitative insight into some of the ultimate recipient survey findings, particularly related to success.</p>

3.0 Profile

3.1 Profile of GTF

The GTF was made available, for the benefit of municipalities, to ensure long-term financial commitments needed to help contain urban sprawl and to invest in new sustainable infrastructure projects in areas such as transit, water and sewers.

Gas tax funding is shared with communities so that they can plan for and build environmentally sustainable municipal infrastructure.

In establishing the GTF, the Government committed to a set of principles designed to:

- < Provide municipalities, both large and small, with long-term, reliable and predictable sources of funding;
- < Ensure equity between regions and between large and small communities;
- < Respect jurisdiction by harnessing the roles and responsibilities of each order of government to pursue shared national priorities and objectives in cities and communities across Canada;
- < Build intergovernmental partnerships to give effect to these priorities; and
- < Set shared objectives and report regularly to Canadians on common outcomes.

Through the GTF, Canada promotes improved quality of life in Canadian municipalities. Budget 2005 states that the funding is to support environmentally sustainable infrastructure in support of shared national outcomes. These outcomes are cleaner air, cleaner water, and reduced greenhouse gas (GHG) emissions.

The specific outcomes for GTF vary between project categories and include:

- < Improving water quality;
- < Improving air quality;
- < Decreasing the negative impacts of wastewater effluent on sources of drinking water and aquatic ecosystems;
- < Increasing the efficiency of wastewater and storm water collection and treatment systems;
- < Reducing the per capita tonnage of solid waste sent to landfill;
- < Improving energy recovery and increased recovery and use of recycled and organic materials;
- < Improving solid waste management;
- < Reducing GHG emissions and energy use; and
- < Increasing capacity for integrated sustainability planning.

For the GTF, the Canada-Ontario-AMO-City of Toronto Agreement was signed June 17, 2005.

AMO is a non-profit organization representing almost all of Ontario’s 445 municipal governments and provides a variety of services and products to its members and non-members. Its mandate is to support and enhance strong and effective municipal government in Ontario. It promotes the value of the municipal order of government as a vital and essential component of Ontario and Canada’s political system. AMO administers GTF funding for 443 municipalities. The funding is entitlement based and disbursed on a per capita basis using the 2001 Population Census Data from Statistics Canada. This does not include the City of Toronto which works directly with Infrastructure Canada. The Province of Ontario administers the portion of the Gas Tax Fund allocated to unincorporated communities, but has no role in the delivery of the AMO administered funding program. AMO funding allocations are as per Table 2.

Table 2: GTF Funding Allocations to Ontario Municipalities Except for Toronto by Fiscal Year

Fiscal Year	Minimum	Maximum	Average (Mean)	Sum
2005-06	\$974.97	\$15,093,912.42	\$389,586.09	\$172,586,636.68
2006-07	\$974.97	\$15,093,912.42	\$389,586.09	\$172,586,636.68
2007-08	\$1,299.81	\$20,122,969.42	\$519,390.12	\$230,089,821.51
2008-09	\$1,624.66	\$25,152,026.43	\$649,194.14	\$287,593,006.18
2009-10	\$3,249.31	\$50,304,052.86	\$1,298,388.29	\$575,186,012.17
Total	\$8,123.72	\$125,766,873.55	\$3,246,145	\$1,438,042,113.22

GTF is delivering this federal funding between 2005 and 2010 for Ontario municipalities to invest in environmentally sustainable municipal infrastructure in the following eligible project categories:

- < Community energy systems
- < Local roads and bridges
- < Public transit
- < Solid waste
- < Wastewater
- < Water

Municipalities can also use GTF for capacity building projects including but not limited to:

- < Integrated community sustainability plans (ICSP)
- < Capital investment plans.

For the period up to December 31, 2007, a little over one thousand projects had been initiated as outlined in Table 3.

Table 3: GTF Project Distribution for Ontario Municipalities Except for Toronto

Type	# of Projects	\$ GTF Funding ¹	\$ Total Spending
Community Energy Systems	50	\$7,844,917.05	\$53,543,873.65
Local Roads and Bridges	641	\$201,748,886.89	\$598,112,919.72
Solid Waste	42	\$48,684,779.62	\$142,430,623.19
Public Transit	91	\$77,056,613.96	\$988,749,474.88
Wastewater	82	\$26,816,268.10	\$153,586,056.39
Water	67	\$12,801,743.65	\$56,088,363.50
Capacity Building	35	\$2,006,629.32	\$5,724,069.23
Total	1,008	\$376,959,838.59	\$1,998,235,380.56

3.2 Profile of PTF

The PTF is designed to contribute to the Government of Canada’s environmental objectives through targeted support for public transit infrastructure in Canadian communities. Building on the current financial support through existing infrastructure, programs and the GTF, the PTF provides funding to those communities with transit systems to contribute to national outcomes of cleaner air and reduced GHG emissions. PTF offers potential to reduce GHG emissions and smog in urban areas by improving services and offering Canadians greater flexibility in their transportation options. Investments aim to make public transit more attractive and induce a shift from auto travel to more fuel-efficient and cost-effective transit. Transit can also lead to a reduction in traffic congestion, thus further improving energy use and air quality.

Through the PTF, Canada will promote improved quality of life in Canada’s municipalities through increased and improved public transit services. The specific outcomes for the PTF include:

- < Reducing GHG emissions and energy use; and
- < Reducing smog forming air emissions.

The PTF provides funding for public transit that will be utilized to improve public transit services to Canadians.

For the PTF, the Canada-Ontario-AMO-City of Toronto Agreement was signed March 30, 2006.

¹ It should be noted that these amounts represent the distribution of GTF funding excluding the City of Toronto, which spends 100% of its funding on transit. For the Canada-Ontario-AMO-City of Toronto agreement as a whole, the total funds for public transit are therefore higher.

AMO administers PTF funding for 78 municipalities that provide transit service. The funding is disbursed on the basis of 2004 ridership data produced by the Canadian Urban Transit Association. This does not include the City of Toronto which works directly with Infrastructure Canada. The Province of Ontario has no role in the delivery of the funding program.

AMO is delivering \$56.743 million in one-time PTF federal funding for eligible Ontario municipalities. This does not include Toronto, which is receiving an additional \$98.4 million.

For the period up to December 31, 2007, 45 projects had been initiated as outlined in Table 4.

Table 4: PTF Project Distribution for Ontario Municipalities Except for Toronto

Type	# of Projects	\$ PTF Funding	\$ Total Spending
Intelligent Transport Systems	8	\$860,300.42	\$2,611,949.33
Para Transit	9	\$238,738.71	\$2,891,173.32
Related Capital Infrastructure	10	\$2,279,841.75	\$22,131,195.19
Rolling Stock	17	\$32,036,926.15	\$250,699,203.67
Other PTF	1	\$54,120.00	\$54,120.00
Total	45	\$35,469,927.03	\$278,387,641.51

4.0 Success / Progress

What is the success / progress achieved to date? Are there any indicators that the programs are encountering problems that prevent them from meeting their objectives, within budget and without unwanted outcomes?

4.1 What is the level of satisfaction with the GTF and PTF programs for recipients and ultimate recipients within each jurisdiction?

Evidence from the interviews, survey and case studies was consistent in showing a high degree of satisfaction with the Gas Tax Fund, albeit with some specific concerns.

Interviewees were most positive about the Fund, including the process for negotiating the Agreement, project categories, eligibility criteria and reporting mechanisms. Specific comments about the GTF include the following:

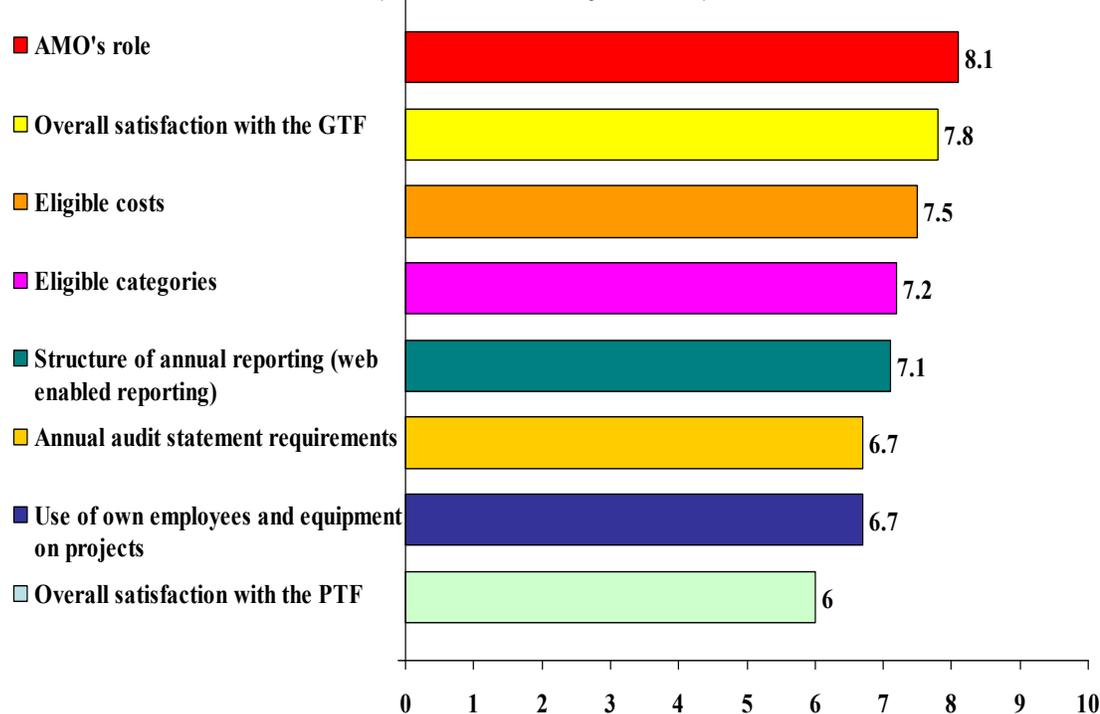
- < Demonstrates a federal government commitment to addressing the municipal infrastructure deficit, and provides long-term, predictable financing that enhances municipal infrastructure planning;
- < Provides flexible terms and conditions (e.g. ability to bank funds up to three years allows investments in larger projects, use funds for debt financing) that allow municipalities to address their specific priorities;
- < Based on a per capita funding formula that is straightforward (other application-based programs require additional resources for consulting services to prepare competitive proposals) and has no matching funds requirement;
- < Straightforward reporting requirements to demonstrate due diligence and outcomes achieved, with performance indicators based on data already being collected by municipalities (therefore efficient use of resources and streamlined reporting requirements); and,
- < Fewer bureaucratic hoops and administrative time requirements in comparisons to other programs (e.g. Canada-Ontario Municipal Rural Infrastructure Fund (COMRIF)).

Interviewees were also generally satisfied with the PTF, which was modelled after the GTF. They felt that it targeted a critical infrastructure need for larger municipalities, and were disappointed that it had not been continued.

The 150 GTF and PTF funding recipients who were surveyed were asked about their level of satisfaction with the two programs (on a scale of 1 to 10, with 1 being not at all

satisfied and 10 being extremely satisfied). Figure 1 shows the level of satisfaction of respondents with various aspects of the two programs.

**Figure 1: Satisfaction with the GTF and PTF
(based on survey results)**



Means are based on a scale of 1 to 10, 1 being not at all satisfied and 10 being extremely satisfied.

As can be seen, respondents were most satisfied with the role of AMO and the GTF overall. They were least satisfied with the reporting requirements and the inability to use their own employees and equipment without prior approval from the Oversight Committee. However, the few municipalities with PTF funding surveyed were relatively less satisfied compared to the GTF.² There was no statistical difference in level of satisfaction in terms of type of municipality or population, except for a lower level of satisfaction for the annual audit requirements for small municipalities receiving small amounts of funding.

Evidence from the case studies also showed general appreciation for the funding provided, which allowed additional capital infrastructure projects to be undertaken. However, some interviewees expressed concern about the resources required to comply with the requirements to report on outcomes. In one case, the municipality is likely to focus resources on one or two large projects in the future to reduce the reporting burden. Another municipality plans to use future GTF resources primarily for roads and bridges

² However, the PTF results are based on a very small number of survey interviews.

projects, and use the AMO formula to quantify benefits. The municipality believes this will avoid the need to provide resources to undertake the data gathering required for other projects.

4.2 What have been the results of the GTF and PTF projects so far in terms of completed infrastructure? Is there a good alignment between the projects selected versus category versus benefits?

4.2.1 *What have been the results of the GTF and PTF projects so far in terms of completed infrastructure?*

Each of the multiple lines of inquiry have provided extensive evidence that describes the various types of infrastructure that have been produced through the GTF and PTF projects that have been reported to the end of December 2007.

The AMO 2007 Annual Expenditure Report in the Agreement for Transfer of Federal Gas Tax Revenues Under the New Deal for Cities and Communities and Transfer of Federal Public Transit Funds provides a summary of the municipalities reports of the results of completed GTF and PTF projects. The report shows that about 1,000 green infrastructure initiatives were funded in Ontario, due in part or completely to the Federal Gas Tax Fund and the Federal Public Transit Fund since the program began. Since the launch of the Federal Gas Tax Fund in 2005 and Federal Public Transit Fund in 2006, more than \$378 million in Federal Gas Tax revenue and \$35 million in Federal Public Transit Funds have been invested in over \$2.2 billion worth of infrastructure improvements in Ontario municipalities. The level of GTF investment for the various categories is presented below, for the year ended December 31, 2007.

Based on project descriptions³ there is evidence that a broad range of new and improved capital infrastructure has or will result from the projects. This includes road resurfacing, recycling containers, new or improved lighting and many other types of infrastructure. The majority of projects relate to local roads and bridges, consequently most of the infrastructure is in this area. These include road resurfacing, road reconstruction or rehabilitation, road drainage or culverts, sidewalk construction and many others. Key capital infrastructure resulting from all GTF projects is outlined in Annex B.

Similarly, based on project descriptions⁴ there is evidence that a broad range of new and improved capital infrastructure has or will result from the PTF projects. Key capital infrastructure resulting from the PTF projects include purchasing of buses and para transit

³ Source: Federal Gas Tax Funds, Aggregate Municipal Annual Expenditures Report – December 31, 2007, 2007 Project Details.

⁴ Source: Federal Public Transit Funds, Aggregate Municipal Annual Expenditures Report – December 31, 2007, 2007 Project Details.

buses or vehicles, surveillance equipment, signage and many others. The full list of capital infrastructure resulting from all PTF projects is outlined in Annex B.

Survey respondents also provided input. When asked to identify the specific results of the GTF and PTF projects in terms of completed infrastructure, those surveyed provided a wide range of responses. Not surprisingly given the large number of roads and bridges projects, the most frequent responses related to new or improved roads. The survey results support the infrastructure identified in the project descriptions (in AMO's annual reports) and are therefore not repeated in this report. The infrastructure identified in the case studies also concur with the infrastructure identified in the project descriptions.

4.2.2 Is there a good alignment between the projects selected versus category versus benefits?

Alignment of Projects to Categories

The **Agreement for the Transfer of Federal Gas Tax Revenues under the New Deal for Cities and Communities** between Canada, Ontario, the Association of Municipalities of Ontario and the City of Toronto specifies that Gas Tax Funding will be used for investments in Environmentally Sustainable Municipal Infrastructure (ESMI) projects and / or capacity building projects. ESMI project categories include:

- < Public Transit, e.g.:
 - Rapid transit
 - Transit buses
 - Intelligent Transport System (ITS)
 - ITS technologies to improve transit priority signalling, passenger and traffic information and transit operations
 - Capital investments
 - Para transit
 - Related capital infrastructure
 - Active transportation infrastructure
- < Water
- < Wastewater
- < Solid waste
- < Community Energy Systems
 - Cogeneration or combined heat and power projects
 - District heating and cooling projects where heat (or cooling) is distributed to more than one building
- < Local roads, bridges and tunnels, active transportation infrastructure (e.g. bike lanes) that enhance sustainability outcomes.

Ontario municipalities have been requested to categorize their projects as either capacity building projects or one of the six ESMI project categories. As reported in the June 18,

2008 Implementation Evaluation of the GTF, the sample of municipalities surveyed agreed that the environmental objectives of the GTF are being addressed.

The AMO representatives interviewed reported that the projects selected by the municipalities are in general well aligned with the GTF categories. It was noted that AMO works closely with municipalities to help them interpret and understand the various categories.

However, based on the infrastructure results outlined in the previous section (section 2.2.1), the following observations are noteworthy:

- < Public Transit – A large proportion of projects are active transportation infrastructure projects (sidewalks, trails, bikeways, pedestrian bridge), which are also eligible under the local roads and bridges category.
- < Water – The projects in this category all appear to be well aligned.
- < Wastewater – The projects in this category all appear to be well aligned.
- < Solid Waste – These projects also appear to be well aligned with the specifications for this type of ESMI projects.
- < Community Energy Systems – The projects described under this category all have some alignment with community energy, although they are not necessarily “energy systems”.
- < Local Roads and Bridges – This is by far the category where the most projects are reported by municipalities. It also appears that some of the projects could fit better under other categories (e.g. some curb and gutter replacement projects were classified as wastewater projects, yet some appear in this category; equipment purchase may not be well aligned with this category; etc.).

The **Agreement on the Transfer of Federal Public Transit Funds** between Canada, Ontario, the Association of Municipalities of Ontario and the City of Toronto specifies that Public Transit Infrastructure capital investments include the following:

- < Rapid Transit Infrastructure
- < Rolling Stock
- < ITS
- < Related Capital Infrastructure
- < Active Transportation Infrastructure
- < Para Transit

Ontario municipalities have been requested to categorize their PTF projects slightly differently from the categories outlined in the Agreement, that is:

- < Rolling Stock
- < ITS
- < Related Capital Infrastructure

- < Para Transit
- < Other

The AMO representatives interviewed agreed that the PTF projects selected by eligible municipalities were also well aligned with PTF categories because of the requirement for asset management and ridership growth plans.

Alignment of Projects to Benefits

To examine the alignment between project categories and the types of benefits occurring, the survey asked respondents what type of projects they had completed and what benefits had occurred or were expected to occur. The following discussion provides a summary of their responses by project category.

Community Energy Systems Projects

Six of those surveyed had completed a community energy systems project. Benefits / results are therefore reported in numbers rather than percentages. Table 5 below identifies how many recipients expected a particular benefit or result and how many reported that this had occurred.

**Table 5: Results of GTF Community Energy Systems Projects
(based on survey results)**

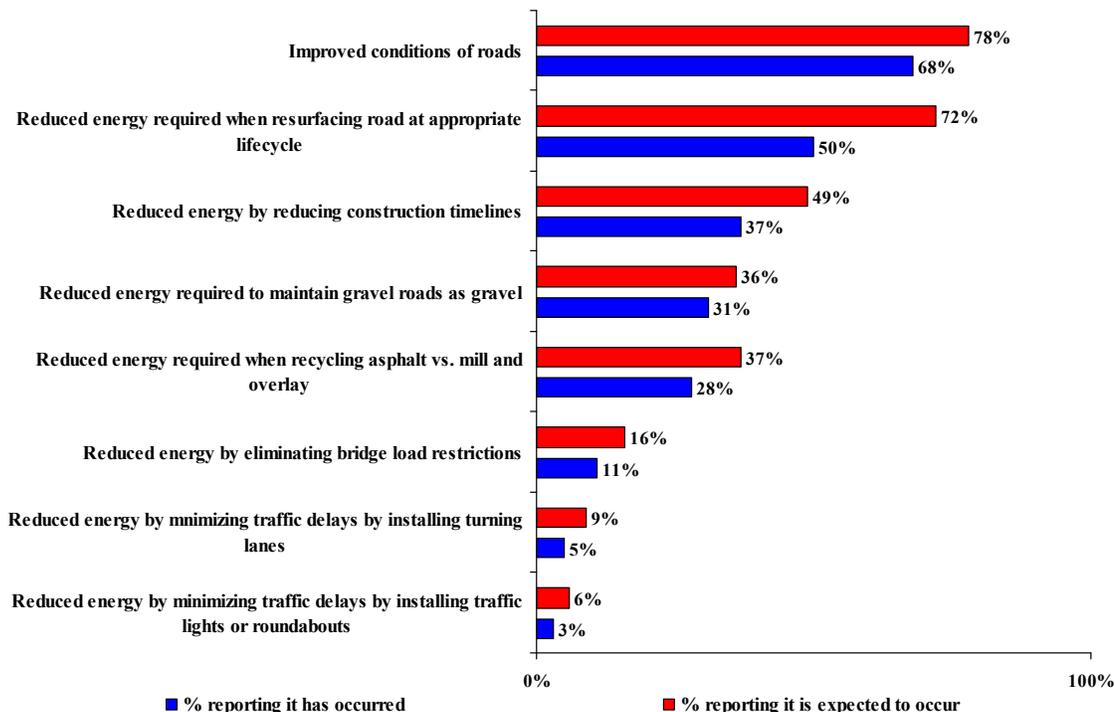
Result / Benefit	# expecting this to occur	# reporting it has occurred
Decrease in heating fuel used	5	5
Decrease in electricity used	2	2
Increase in renewable and clean energy capacity	1	1
Increase in energy consumption from alternative or renewable sources	1	1

Table 3 shows that in all cases, the expected results have, in fact occurred. The most frequently reported benefit is a decrease in heating fuel used.

Local Roads and Bridges Projects

In total, 121 of the ultimate recipients surveyed had completed one or several local roads and bridges projects. Figure 2 shows the proportion of recipients who expected a particular benefit versus the proportion who indicated that this has occurred. As shown, about two-thirds reported that improved road conditions have occurred. While 50% or fewer reported that one of the stated reduced energy results has occurred, further analysis of the survey results shows that 63% reported at least one of the energy reduction benefits with one reporting as many as five of the stated benefits.

**Figure 2: Results of GTF Local Roads and Bridges Projects
(based on survey results)**



Other top-of-mind results or impacts of the GTF local roads and bridges projects included:

- < Improved safety (26%);
- < Reduced GHGs / reduced harm to the environment (17%);
- < Improved roads (12%);
- < Improved traffic flows, no detours, more direct routes (12%);
- < Savings (8%);
- < Reduced complaints, increased satisfaction (6%);
- < Extended life of road (5%); and
- < Reduced maintenance (5%).

All other responses were mentioned by fewer than 5% of the respondents.

GTF Public Transit and PTF Projects

As only ten surveyed respondents had completed a public transit project (GTF and / or PTF), benefits / results are reported in numbers rather than percentages. Table 6

identifies how many recipients expected a particular benefit or result and how many reported that this had occurred.

**Table 6: Results of Public Transit Projects (GTF and PTF)
(based on survey results)**

Result / Benefit	# expecting this to occur	# reporting it has occurred
Increase in the number of passengers in service area	6	5
Change in the average age of fleet	4	4
Better connectivity with other transport routes (e.g. park and ride lots)	4	4
Increase in the number of wheelchair accessible buses	4	4
Improved sidewalks	4	4
New sidewalks	4	4
Improved wheelchair access in transit fixed facilities	4	3
Increase in bike lanes	4	3
Increase in the number of buses that use alternative fuels or hybrids	2	2
Increase in the percent of surface or subway routes with auto stop announcements	2	1
Increase in the kilometres of High Occupancy Vehicle (HOV) lanes	1	1
Increase in the number of buses with bike racks	1	1
Increase in the number of buses with electronic cards	2	0
Increase in express bus lanes	1	0

Quantifiable results, while based on a small number of cases, included:

- < An increase from 6,500 conventional passenger trips per person per year in 2005 to 9,500 per year now, representing a 46% increase in passenger trips (based on one respondent);
- < A decrease in the average age of the fleet from 15 years in 2005 to 2 years now (based on one respondent); and
- < An average increase in the number of buses accessible to wheelchairs from four in 2005 to eight now representing a 100% increase (based on three respondents).

Solid Waste Projects

In Table 7, benefits / results are reported in numbers rather than percentages, as only 12 surveyed respondents had completed a solid waste project.

**Table 7: Results of GTF Solid Waste Projects
(based on survey results)**

Result / Benefit	# expecting this to occur	# reporting it has occurred
Improvements in ground and surface water	9	7
Increase in residential solid waste diverted from landfill	7	4
Increased participation in organics collection or recycling program	6	2

Quantifiable results included the following:

- < On average, 32.5% of residential solid waste has been diverted between 2005 and now in two municipalities (25% in one municipality and 40% in the other); and,
- < Participation in organics collection or recycling program has increased from 0% to 75% of residents in one municipality.

Wastewater Projects

Due to the fact that only 10 surveyed respondents had completed a wastewater project, benefits / results are reported in numbers rather than percentages. Table 8 identifies how many recipients expected a particular benefit or result and how many reported that this had occurred.

**Table 8: Results of GTF Wastewater Projects
(based on survey results)**

Result / Benefit	# expecting this to occur	# reporting it has occurred
Improvements to treatment plants	8	5
Reduction in the number of wastewater main backups	4	4
Increased kilometres of wastewater systems separated from storm water systems	2	2
Reduction in the amount of wastewater estimated to have by-passed treatment	3	2
Reduction in the percentage of wastewater test results that indicate that wastewater discharge objectives were not met	5	1
Increase in the number of households on municipal wastewater collection whose wastewater is treated to a high quality	1	0
Reduction in the number of beach closure days	1	0

Municipalities were unable to provide any quantifiable information on these results.

Water Projects

Only 12 surveyed respondents had completed a water project. Benefits / results are therefore reported in numbers rather than percentages. Table 9 identifies how many recipients expected a particular benefit or result and how many reported that this had occurred.

**Table 9: Results of GTF Water Projects
(based on survey results)**

Result / Benefit	# expecting this to occur	# reporting it has occurred
Reduction in the percentage of test results that showed adverse water quality or exceeded maximum concentrations as prescribed by regulation	6	3
Reduction in the level of water contaminants	7	2
Reduction in the number of water main breaks	3	2
Reduction in the number of days when a boil water advisory is in effect	4	1
Increase in the number of households with water meters	2	1

Quantifiable results, while based on a small number of cases, include:

- < One municipality increased the number of households on water meters from 1,100 in 2005 to 1,150 now; and,
- < Reduction from 60 days with a boil water advisory in 2005 to none now in one municipality.

The case studies also provided evidence of the alignment between projects and the GTF categories. Of the 39 projects examined in the case studies, all but one are well aligned with the category in which they have been placed and the type of benefits expected. The exception is one project involving the purchase of two hybrid vehicles for the municipal fleet. This project was placed in the Roads and Bridges category which does not seem to be the appropriate category.

4.3 Did the GTF and PTF programs result in environmentally sustainable municipal infrastructure?

All methodologies contributed to the findings that address this issue. Document review showed that the sample of municipalities surveyed as part of the Implementation Evaluation of the GTF agreed that the environmental objectives set for the GTF are being

addressed⁵. However, the documentation does not include outcome-related data for the PTF beyond what was reported in the previous section.

Municipalities have provided quantitative data to AMO on the actual outcomes of completed projects in specific categories provided by AMO. This data was analyzed and the results are summarized below for a number of GTF categories. Detailed results can be found in the Data Analysis Technical Report. No data was collected for capacity building or community energy systems.

GTF Local Roads and Bridges

Of the 641 local roads and bridges projects undertaken by municipalities, 406 are completed with outcomes reported in Table 10. The 406 projects were completed in 187 municipalities.

Table 10: Types of GTF Local Roads and Bridges Projects Undertaken by Ontario Municipalities Except for Toronto

Type of Project	#	%
Mill and overlay	227	55.9
Unpaved roads	87	21.4
Cold-in-place recycling	48	11.8
Bridge work	33	8.1
Turning lanes	6	1.5
Traffic signals	3	0.7
Bridge load restriction	2	0.5
Total	406	100.0

These projects resulted in reductions in CO₂ emissions and reduced energy consumption due to improved road condition and reduction in energy consumption during construction.

⁵ Implementation Evaluation of the GTF – Survey Results – Ontario (June 18, 2008).

- < 18 of 28 respondents agree or strongly agree with the following statement “GTF has allowed infrastructure investments in my municipality that have led to: *Cleaner Air.*”
- < 14 of 28 respondents agree or strongly agree with the following statement “GTF has allowed infrastructure investments in my municipality that have led to: *Cleaner Water.*”
- < 17 of 28 respondents agree or strongly agree with the following statement “GTF has allowed infrastructure investments in my municipality that have led to: *Reduction of Green House Gas Emissions.*”

GTF Solid Waste

Of the 42 solid waste projects, 14 are completed with outcomes information available. Projects resulted in an average increase of 34% in the amount of residential solid waste diverted from landfill. Other projects resulted in an increase in organic waste collection or recycling. Based on the data, close to 200,000 additional households are now participating in organics collection or recycling.

GTF Public Transit

Of the 91 GTF public transit projects, 41 are completed with outcomes information available. Projects resulted in an increase in the number of passengers taking public transport (a total of more than 4,500 additional conventional passenger trips per person), and an increase in the number of buses with bicycle racks, and wheel chair access.

GTF Wastewater

Of the 82 wastewater projects, 30 are completed with outcomes information available. The projects resulted in an increase in the number of households on municipal wastewater collection whose wastewater is being treated to a higher quality (close to 13,000 households are benefiting). The projects have also contributed to a slight reduction in the number of wastewater main backups.

GTF Water

Of the 67 water projects, 42 are completed with outcomes information available. The projects resulted in improved water quality and a reduction in the number of boil water days. Other outputs included a reduction in the number of water main breaks.

PTF (All)

Of the 45 PTF projects, 38 are completed with outcomes information available. Projects have resulted in newer fleets, with improved wheelchair accessibility, as well as increased use of hybrid vehicles and alternative fuels.

Interviewees agreed that the GTF and PTF contribute to environmentally sustainable municipal infrastructure as they encourage municipalities to invest in renewing existing infrastructure leading to reduced operational costs. Interviewees representing municipal associations identified a number of projects that have resulted in environmentally sustainable municipal infrastructure (e.g. recycling programs, energy from waste facility, newer buses, study to assess the long-term sustainability of landfill site, improved drainage through road work resulting in reduced flooding, turning lanes to reduce idling, and customer service features for transit buses such as security cameras, bike racks, and new fare boxes).

As reported in the previous section, survey respondents reported that municipal infrastructure projects have resulted in improvements in environmental sustainability. There is evidence of such results for all types of GTF and PTF projects.

All of the projects examined in the case studies have contributed to municipal infrastructure that has resulted or will result in environmental sustainability benefits of some form. Table 11 provides a summary of the types of environmental benefits associated with the projects.

Table 11: Environmental Results of Case Study Projects

Category	# of Projects	Environmental Benefits
Capacity Building	1	Strategic plan to guide development of environmentally sustainable infrastructure.
Community Energy Systems	17	Overall reduction in electrical energy and fossil fuel consumption, with accompanying reductions in pollution, GHGs and energy costs.
Local Roads and Bridges	7	Reduced fuel consumption, pollution, GHG production, improved safety, reduced traffic delays and flooding.
Solid Waste	2	Reduction in landfill, reduced contamination of groundwater near landfill sites.
Public Transit	4	Increased ability of pedestrians to travel between major residential, commercial, public and educational sites, leading to reduced vehicular traffic on local roads and reduced fuel consumption, pollution and GHG production.
Wastewater	5	Reduced infiltration of storm water into sanitary sewer system, reduced flooding, improved water quality.
Water	1	Fewer leaks, reduced contamination of water supply.
Public Transit Fund	1	Decreased pollution, improved passenger access, reduction in average age of the fleet, reduced maintenance costs.

4.4 Did GTF and PTF contribute to increased planning capacity of municipalities?

All lines of evidence contribute to this issue. Both funding agreements include requirements for planning. Section 8.2 of the Municipal Funding Agreement requires that, in order to receive funding, each municipality develop or enhance an existing ICSP over the life of the Agreement. In Ontario, the Oversight Committee determined that, since most municipalities have an existing Official Plan (OP) that is consistent with the Provincial Policy Statement or that will conform to other integrated planning policies such as the Growth Plan for the Greater Golden Horseshoe, this is sufficient to meet the requirements for an ICSP. Nonetheless, AMO has provided guidance to help municipalities fulfill this requirement through an ICSP Backgrounder dated August 2007. In June 2008, AMO produced a Sustainability Planning Toolkit for municipalities in

Ontario that provides a set of 13 tools to enable each municipality to assess where it lies on a ‘sustainability continuum’ and to assist in making progress.

Analysis of the data shows there have been relatively few capacity building projects. In total, 24 municipalities have undertaken 35 capacity building projects. These projects have increased municipal planning capacity through:

- < the completion of assessment studies and / or environmental assessment studies for future projects (10 projects);
- < the acquisition of systems including asset management systems, work management systems, geographic information systems and communication systems, (8 projects in total);
- < the preparation of plans including roads and bridges plans, asset plans, strategic / business plans, official plans, pollution prevention control plans (8 projects);
- < engineering studies (3 projects);
- < compilation of inventories (2 projects); and
- < other projects such as monitoring, database development, new waste site analysis, and landfill site reclamation (1 of each).

Interviewees representing municipal associations indicated that the GTF contributed to increased planning capacity for municipalities due to the predictability of the funds and the ability to bank investments over a period of time. This predictability gives municipal councils greater confidence in their ability to set 5 to 10 year capital infrastructure plans.

Due to the relatively small number of projects in this area, the survey results provided limited information. Only seven of the surveyed recipients had undertaken a capacity building project of which four were completed. The survey provided the following information:

- < All four completed projects were completed as planned; and,
- < Two respondents indicated that the project had increased their municipality’s planning capacity.

The four case studies included only one project that involved planning. The County of Frontenac used GTF funding to develop an ICSP, which is a requirement for GTF funding. The County has taken an innovative approach by developing the plan in co-operation with the four townships within the County. The plan provides an integrated County-wide strategy for sustainable development, planning and carrying out projects using common approaches among the County and townships. The plan will also be used

for selecting and allocating funds from the remaining GTF resources and encouraging projects that benefit more than one municipality.

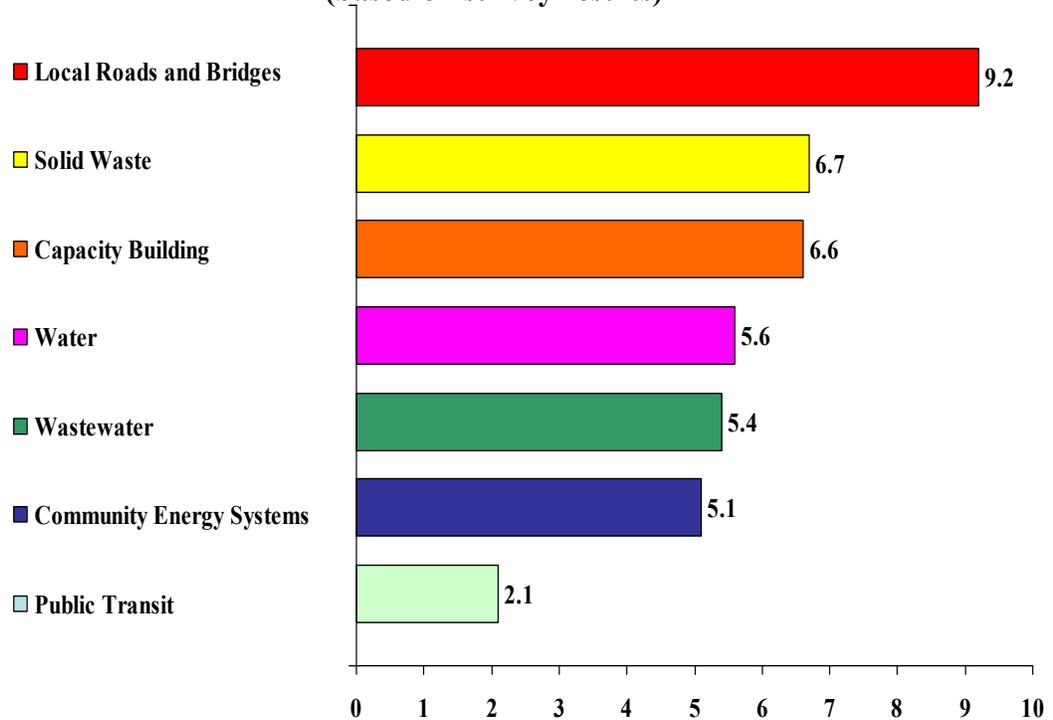
Many of the projects undertaken by municipalities examined in the other case studies were associated with existing plans. In one case, projects were selected from priorities identified in a municipal capital plan. In another, an energy audit identified a number of areas for replacement of inefficient elements of the heating, ventilating and air conditioning (HVAC) system. Also, many of the projects involving major expenditures, such as the upgrade of the air humidification system at the Pickering Civic Complex are based on an engineering planning report that specifies the work to be done.

The limited evidence available shows that the PTF also supports increased planning capacity. For example, the PTF Agreement requires eligible recipients to submit a Transit Ridership Growth Plan and a Transit Asset Management Plan as part of their request for funding. Both of these documents are also required by the Province of Ontario for its gas tax sharing initiative. Interviewees did not identify any additional ways in which the PTF contributed to increased planning capacity, as to be eligible, recipients were required to have a Transit Ridership Growth Plan and Transit Asset Management Plan in place.

4.5 Are there priority municipal infrastructure needs that have not been met by GTF and if so, why not?

Evidence to address this issue was obtained from the survey and interviews. Survey respondents were first asked about the importance of the current components of the GTF (on a scale of 1 to 10, with 1 being not at all important and 10 being very important). Average survey scores are shown in Figure 3.

**Figure 3: Importance of GTF Project Types
(based on survey results)**



Means are based on a scale of 1 to 10, 1 being not at all important and 10 being extremely important.

As shown in Figure 3, the local roads and bridges category is considered as the most important category, followed by solid waste and capacity building.

When asked if there were any other types of infrastructure projects that should be supported through the GTF, less than half (45%) said there were other types of infrastructure projects that should be supported. The following is a list of those other types of projects most mentioned by respondents:

- < Recreational, cultural and / or sports facilities (19% of all respondents);
- < Other building infrastructure (7%);
- < Municipal building (6%);
- < Fire and / or police department vehicles, equipment and / or facilities (3%);
- < Properties such as parks and trails (3%);
- < Equipment (3%); and
- < More of the existing categories but with fewer restrictions (3%).

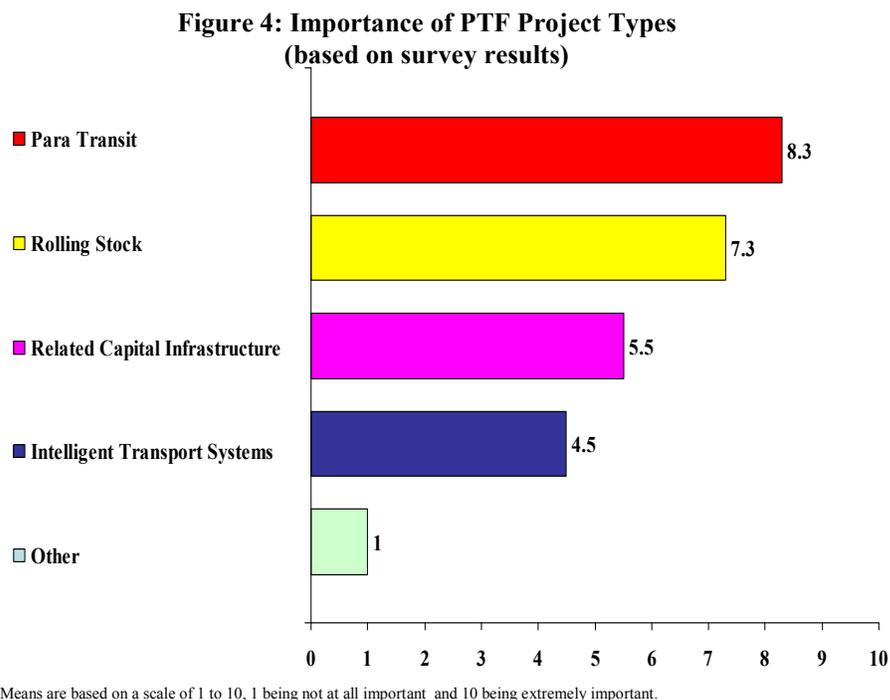
Other types of possible project categories were mentioned by fewer than 3% of respondents.

Interviewees commented that in general, they felt that the scope of project categories was broad enough to address the most pressing needs of municipalities for infrastructure renewal. A few interviewees from municipal associations would like to expand the eligible categories to include recreational facilities, the category most often mentioned by those surveyed.

4.6 Are there priority transit infrastructure and transit management needs that have not been met under PTF, and if so, why not?

Interviewees and survey respondents provided input to address this issue. The interviewees noted that, as a one-time fund, the PTF helped municipalities advance projects identified within existing transit plans. Because of the limited duration, its contribution to addressing priority transit infrastructure and transit management needs was only partial. Municipal associations stressed that the transit funding is required on a sustained basis.

Only four survey respondents responded to questions about the PTF. They were first asked about the importance of the current components of the PTF and then asked if there were any other types of infrastructure projects they would like to see supported. Figure 4 provides a summary of their responses. As shown, para transit projects are deemed the most important, followed by rolling stock projects. Since only four recipients answered these questions, further analysis of the data was not possible.



No other type of public transit projects was suggested by respondents.

4.7 Have the GTF and PTF produced incremental capital spending on municipal infrastructure?

Evidence was provided from all lines of inquiry to address the issue of incrementality. At least in theory, incrementality is assured, as there is a built-in requirement in the Agreements for both the GTF and PTF to produce incremental capital spending on municipal infrastructure. Essentially, the revenues received from both funds by each municipality must result in increased investment in environmentally sustainable infrastructure equal to the amount of revenue received.

While not directly related to incrementality, the dollars leveraged provide insight into some of the incremental spending that occurred, particularly in light of the fact that a large number of projects would not have occurred without GTF or PTF funding. Analysis of the GTF data base shows that the projects undertaken up to December 31, 2007 include significant investments from other federal, provincial and municipal organizations. This is summarized in Table 12. As can be seen, on average, an additional \$3.75 has been provided by other funders for every \$1.00 of GTF funding. Similarly, the amount is \$4.00 for every \$1.00 of PTF funding.

Table 12: Investments from Others in GTF and PTF Projects in Ontario Municipalities Except for Toronto

Type of Project	Program \$	Total \$	Leveraging
GTF			
Capacity Building	\$2,006,629.32	\$5,724,069.23	\$1.00 to \$1.85 ¹
Community Energy Systems	\$7,844,917.05	\$53,543,873.65	\$1.00 to \$5.82
Local Roads and Bridges	\$201,748,886.89	\$598,112,919.72	\$1.00 to \$1.96
Solid Waste	\$48,684,779.62	\$142,430,623.19	\$1.00 to \$1.93
GTF Public Transit	\$77,056,613.96	\$988,749,474.88	\$1.00 to \$11.83
Wastewater	\$26,816,268.10	\$153,586,056.39	\$1.00 to \$4.73
Water	\$12,801,743.65	\$56,088,363.50	\$1.00 to \$3.38
Total GTF	\$420,246,458.44	\$1,998,235,380.60	\$1.00 to \$3.75

Table 12: Investments from Others in GTF and PTF Projects in Ontario Municipalities Except for Toronto

Type of Project	Program \$	Total \$	Leveraging
PTF			
Intelligent Transport Systems	\$860,300.42	\$2,611,949.33	\$1.00 to \$2.00
Para Transit	\$238,738.71	\$2,891,173.32	\$1.00 to \$11.11
Related Capital Infrastructure	\$2,279,841.75	\$22,131,195.19	\$1.00 to \$8.71
Rolling Stock	\$32,036,926.15	\$250,699,203.67	\$1.00 to \$6.83
Other PTF	\$54,120.00	\$54,120.00	\$1.00 to \$0.00 ²
Total PTF	\$35,469,927.03	\$278,387,641.51	\$1.00 to \$6.85
Total GTF and PTF Combined	\$455,716,385.47	\$2,276,623,022.10	\$1.00 to \$4.00

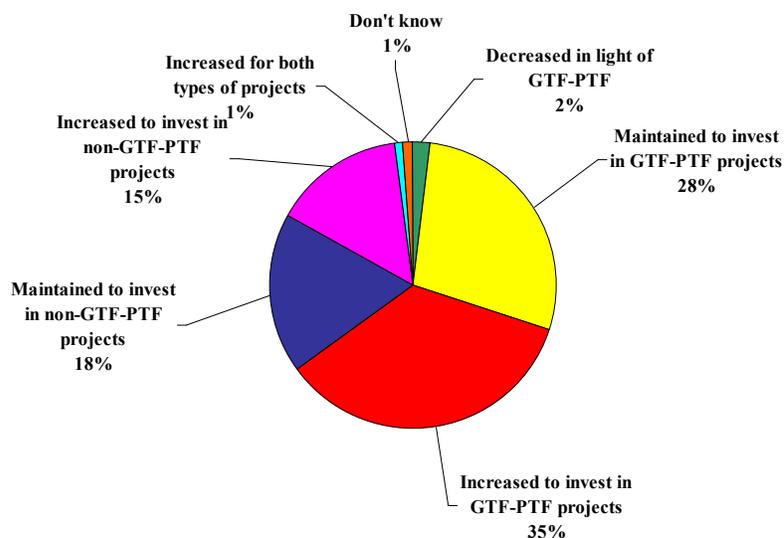
¹ Reads: For every \$1.00 of GTF funding, an additional \$1.85 was invested in capacity building projects.

² As all other PTF projects were fully funded by the program, the projects did not result in any additional investments. Therefore, this reads: for every \$1.00 of GTF funding, no (0) additional funds were invested in other PTF projects.

As reported previously, interviewees also identified the requirement for incrementality built into the Agreement which is intended to prevent municipalities from cutting back on what they would otherwise spend for infrastructure projects without the GTF and PTF funding. Several interviewees indicated that some projects were undertaken sooner than they would have been without the funding. Interviewees also noted that, as the PTF was a temporary fund, it did not have the same impact as the GTF.

The survey addressed this question from two perspectives. First, respondents were asked to report on the impact of the GTF and PTF on their overall capital spending on municipal infrastructure. Figure 5 shows that 51% reported that they had increased their internal municipal capital spending; of these, 35% increased their spending to invest in GTF or PTF projects whereas 15% increased their spending to invest in non GTF or PTF projects and 1% said they did both. Another 46% indicated that they maintained their internal spending levels (28% to invest in GTF or PTF projects and 18% to invest in other projects). Only 2% indicated that they had decreased their spending in light of the GTF and PTF. This is not permitted under the Agreement.

Figure 5: Impact of GTF and PTF on Municipal Capital Spending



The incremental impact of the GTF and PTF was also examined from the perspective of the projects themselves. Respondents were asked:

If the GTF and PTF funding had not been available for the project(s) undertaken by your municipality, would it have had a major negative impact on the project, a minor negative impact on the project or no impact at all on the project?

Those who said major or minor negative impact were asked specifically what would have happened. From the combination of these two questions, a project incrementality scale was developed as follows:

- < Full incrementality – If the GTF and PTF had not been available, the municipality would not have undertaken the project(s) which is viewed as a major negative impact.
- < Major incrementality – If the GTF and PTF had not been available, it would have had a major negative impact on the project(s) but the project(s) may still have been completed. However, the project could have started later, taken more time to complete, been of a smaller scope, of less quality, etc.
- < Minor incrementality – If the GTF and PTF had not been available, it would have had a minor negative impact on the project(s).

- < No incrementality – If the GTF and PTF had not been available, it would not have had any impact on the project(s).

The results are depicted in Figure 6.

Figure 6: Total Incrementality
(Impact on projects if GTF-PTF not available)

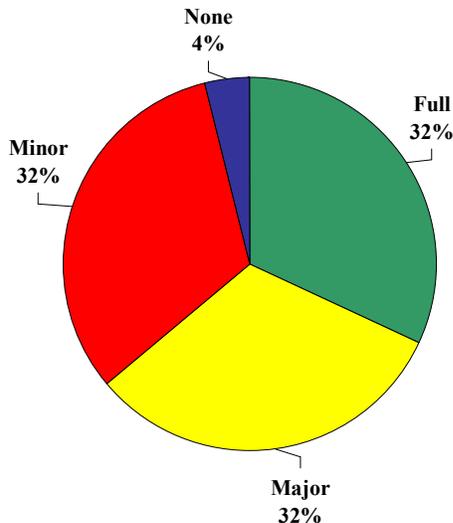


Figure 6 shows that, in one out of three municipalities, the projects would not have happened without the GTF and PTF and another 32% indicated that, while they may still have undertaken the project, the absence of funding would have had a major negative impact on the project in that it would have:

- < Been delayed (28% of those indicating major incrementality);
- < Taken more time to complete (15%);
- < May not have happened (13%);
- < Would have been reduced in scope (13%);
- < Would have had to find money elsewhere since the project had to be done (10%); and,
- < All other responses were provided by less than 10% of the respondents.

It is also interesting to note that five municipalities indicated that the absence of funding would not have had any impact whether the project was undertaken. However, this was due to the following reasons:

- < The municipality had to do the project and therefore it would have been done with or without the funding (4 of the 5 respondents said this); and

- < There was not enough money given to our municipality to have an impact (1 of the 5 respondents said this).

The case studies provided general confirmation of the other findings. Based on discussions with municipal staff, it is clear that the availability of GTF and PTF funding has allowed the four municipalities to undertake more capital expenditure projects than if the funding were not available. For the four municipalities examined, many of the projects undertaken with GTF funds had no other source of funding. On that basis, there was full incrementality of the GTF projects. However, some of the projects carried out with GTF funding were priority projects in order to meet building, electrical or safety code requirements. These projects would likely have been carried out in any case. Use of municipal funds for these projects would have meant that funding would not have been available for some other projects. As one interviewee commented, the GTF has allowed his municipality to undertake a number of important projects that contributed to sustainability that would not have been undertaken due to lack of internal resources.

4.8 Did the GTF and PTF programs contribute to municipal long-term sustainability planning?

The evidence from multiple lines of evidence all shows that the GTF has contributed to municipal long-term sustainability planning.

For example, the 2007 Annual Expenditure Report states that municipalities are making progress in fulfilling their requirements under the GTF for Capital Investment Plans (CIP). The GTF also requires all municipalities to have an ICSP. AMO has made a commitment to include progress on the CIP and ICSP processes by municipalities in the 2008 annual report for the GTF.

Interviewees from AMO and municipal associations generally felt that the long-term and predictable funding provided through the GTF has led to the development of better long term revenue plans and ultimately smarter investments. A few interviewees commented that Ontario is well advanced in long-term sustainable planning in part due to requirements in the Smart Growth Legislation. Ontario's Smart Growth vision focuses on fostering and managing growth in areas across the province and is based on three principles: strong economy, strong communities and a clean, healthy environment. This requires integrated decisions by all orders of government affecting municipal infrastructure on issues such as transportation, land use, housing and public investment, and to ensure these decisions improve Ontario's quality of life.

According to municipal interviewees, the requirement for each municipality to have an ICSP, which is designed to be built on existing planning processes, will further enhance this objective. Some of the smaller municipalities are in the early stages of developing municipal plans.

The survey results also supported what interviewees noted. Survey respondents were asked directly if the GTF had contributed to their municipality's long-term sustainability planning and, if so, how. The survey results show that 80% of all respondents indicated that the GTF had contributed to their long-term sustainability planning. Specific examples provided include the following:

- < It allowed the municipality to implement its plan, do the planned project(s), replace existing infrastructure or get new infrastructure as planned (40%);
- < It allowed the municipality to undertake the projects sooner than planned or complete them faster than anticipated (17%);
- < It allowed the municipality to do more projects (12%);
- < It allowed the municipality to plan for the future and integrate the GTF into its plan (11%);
- < It provided the needed access to money (more money) for infrastructure (8%); and
- < It allowed the municipality to extend the life of its existing infrastructure (8%).

Only one of the four case studies included an example of the use of GTF for planning. The County of Frontenac has developed an ICSP which provides an integrated long-term sustainability plan for the County and the four townships in the County. However, many other projects examined in the case studies were undertaken in response to priorities identified in existing long-term capital plans.

There is also some evidence of the contribution of the PTF program to long range planning. All municipalities participating in the federal public transit program were required to submit to AMO a comprehensive transit strategy and a 10 year Transit Asset Management Plan as required by the Province of Ontario for funding under the Dedicated Gas Tax Funds for Public Transportation Program. However, interviewees felt that due to the fact that the PTF was temporary funding, it has not had as great an impact on long-term sustainability planning as the GTF.

4.9 Have the programs met provincial and municipal objectives? Have the optional commitments under GTF chosen by the province been met, and what were the results / impacts?

4.9.1 Have the programs met provincial and municipal objectives?

Interviews and the survey both confirmed that the GTF and PTF have contributed to meeting provincial and municipal objectives related to overcoming the outstanding infrastructure deficit and helped establish an effective three way partnership among the federal, provincial and municipal governments.

Interviewees who had participated in developing the implementation agreement between Infrastructure Canada and AMO identified some of the key objectives of the Agreement from a municipal perspective. They include:

- < Addressing the infrastructure deficit by infusing the capital needed to enable more timely completion of municipal infrastructure projects;
- < Demonstrating that municipalities can use federal funding in a cost-effective and accountable way;
- < Ensuring a fair and equitable formula as the basis for allocating funds;
- < Providing flexibility by allowing funds to be banked to save for larger investments and / or used for debt financing;
- < Ensuring flexibility in eligible project categories; and
- < Incorporating existing planning processes into ICSPs.

Provincial interviewees also discussed the desire to have flexible eligibility criteria and to use existing processes where possible to minimize the reporting burden.

The survey provided information about the contribution of the programs to the achievement of municipal objectives. Overall, survey respondents indicated that the GTF and PTF, as designed, were able to meet the municipal infrastructure needs of their community fairly well (mean of 7.5 out of 10, 10 being fully; 55% giving a rating of 8 or more). Those providing a rating of 6 or less were asked in what way the GTF and PTF were not able to meet their needs. Of this group, 29 out of 36 said that there was not enough money, 6 said that the program was not flexible enough or that it was too restrictive, 5 said that the audit and other reporting requirements were too burdensome and 1 said that the formula was not equitable. These design concerns are mentioned in a number of sections throughout this report.

4.9.2 *Have the optional commitments under GTF chosen by the province been met, and what were the results / impacts?*

Interviewees were asked about this aspect of the GTF agreement, however, no one was aware of any ‘optional commitments’ added by the Province of Ontario to the mandatory commitments within the Gas Tax Fund program Terms and Conditions.

4.10 Did the GTF foster collaborative approaches across all orders of government?

There is evidence from all lines of evidence that the GTF has fostered collaborative approaches across all orders of government (in particular, the federal and municipal orders).

Collaboration is evident in the governance structure of the program as well as in decisions that have been made with respect to communication plans, planning and reporting approaches and the development of outcomes indicators. The collaborative approach is shown by the membership of the Oversight Committee, which includes two representatives from the Government of Canada, AMO and Toronto, as well as two advisors from the Province of Ontario. The Oversight Committee is responsible for overall implementation of the GTF and PTF, the resolution of disputes between parties, the development of outcomes indicators and the development of ICSPs. Evidence of collaboration is provided in the June 28, 2007 minutes of the Oversight Committee as demonstrated through the following decisions. The Oversight Committee agreed to approve the ICSP approach and Capital Investment Plan approaches proposed by AMO and Toronto. The Canada-AMO Gas Tax Fund Communication Plan also provides evidence of collaborative efforts between levels of government. The document lays out the roles and responsibilities of Infrastructure Canada, AMO, the GTF Ontario Technical Sub-Committee and Oversight Committee, and municipalities.

The data analysis shows that other federal and provincial organizations participated in funding relatively few projects. In most cases, the municipality also contributed funds. Table 13 shows the involvement of all three orders of government in projects. As can be seen, federal and provincial partners contributed to a higher percentage of PTF projects, compared to GTF.

Table 13: Other Orders of Government Financially Contributing to GTF and PTF Projects in Ontario Municipalities Except for Toronto

Type	# Projects in Total	# with Other Federal Funds	# with Provincial Funds	# with Municipal Funds
GTF				
Capacity Building	35	0	0	27
Community Energy Systems	50	0	2	25
Local Roads and Bridges	640	13	21	507
Solid Waste	42	1	1	30
GTF Public Transit	91	3	6	70
Wastewater	82	2	4	63
Water	67	0	1	51

Table 13: Other Orders of Government Financially Contributing to GTF and PTF Projects in Ontario Municipalities Except for Toronto

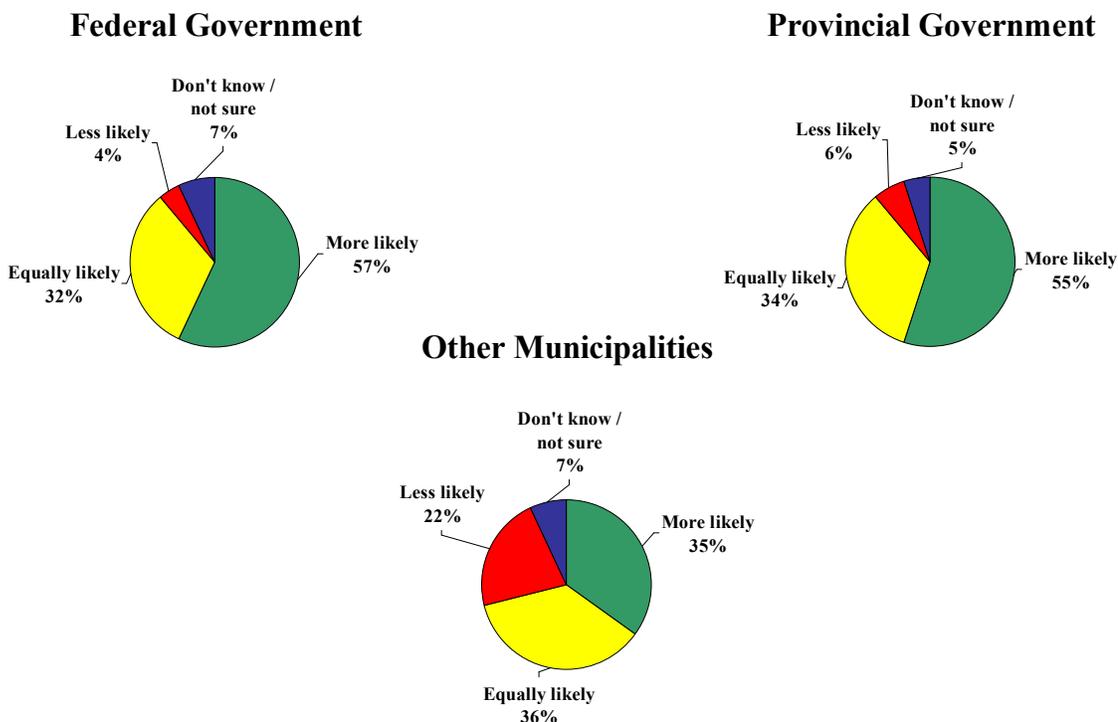
Type	# Projects in Total	# with Other Federal Funds	# with Provincial Funds	# with Municipal Funds
Total GTF	1,007	19	35	773
PTF				
Intelligent Transport System	8	0	2	5
Para Transit	9	0	1	7
Related Capital Infrastructure	10	1	3	7
Rolling Stock	17	2	7	14
Other	1	0	0	0
Total PTF	45	3	13	33
Total GTF and PTF	1,052	22	48	806

Several interviewees also felt that the GTF has helped to foster collaborative approaches across all orders of government. Interviewees indicated there was a real attempt on the part of Infrastructure Canada to incorporate and understand municipal interests.

As mentioned previously, some interviewees also mentioned the collaborative approach built into the Agreement through the Oversight Committee which includes membership from the three orders of government and the City of Toronto. The work of the Oversight Committee and Technical Working Group has contributed to positive working relationships among the different orders of government.

The survey also provided evidence about collaborations among the different orders of government. Respondents were asked if, as a result of the GTF and PTF projects undertaken by their municipality, they were more or less likely to collaborate on initiatives with other municipalities, the provincial government and / or the federal government. As shown in Figure 7, over half of respondents felt that their municipality is more likely to collaborate with the federal government and provincial governments, and about a third that collaboration with other municipalities was more likely.

Figure 7: Contribution of GTF-PTF to Improved Collaborations



For the case studies, only three of the thirty-eight GTF projects in the four municipalities had also received funding from other federal and provincial program sources. This agrees with the broader analysis that showed few projects that were jointly funded by other orders of government. One municipality, Peterborough, received an Ontario Municipal Road and Bridge Infrastructure Investment grant of \$1.2 million to rehabilitate an important bridge, and also received \$75,000 from FedNor (federal) through the local Community Futures Development Corporation (CFDC) to help develop a pedestrian trail. The County of Frontenac case study is an example of increased collaboration among municipal governments as a result of GTF funding. The development of the ICSP involved the Upper Tier municipality of Frontenac as well as the four Lower Tier municipalities (townships) within the County. The plan has also contributed to a more collaborative approach for dealing with County-wide and trans-boundary issues that affect more than one township.

4.11 What other effects, both beneficial and adverse, have the GTF and PTF programs had on recipients of funding? Are some recipients of funding affected more by the program than others? Are there some effects due to limited capacity?

In addition to the direct benefits of having new and improved municipal infrastructure that contributes to reduced environmental and GHG impacts, interviewees and survey respondents identified other benefits and problems associated with the GTF and PTF programs. The following benefits were identified by interviewees:

- < Improved relationship between federal and municipal orders of government, and an awareness of mutual priorities;
- < Through AMO, sharing of best practices and examples of innovative, cost-effective technologies;
- < Ability to develop long term infrastructure plans based on assured funding; and
- < Potential for smaller municipalities to pool resources or work together on common objective.

On the negative side, interviewees noted that the criteria for allocation based on population means that smaller municipalities receive very small allocations, not enough to accomplish even small projects. Some suggested adding an allocation based on number of kilometres of roadway, or providing a minimum level of funding per municipality sufficient to accomplish a reasonable size project. Additionally, as mentioned earlier, the reporting requirements are a burden, particularly on some smaller municipalities with limited staff.

Survey respondents identified many of the same beneficial and negative effects as the interviews. Beneficial effects included easy access to multi-year funding. Safety benefits were mentioned by some in addition to environmental benefits. Most of those surveyed could not identify any problems. However, like interviewees, a few people surveyed mentioned various aspects of the reporting burden as a problem, particularly for small municipalities. The funding formula was also identified as an issue.

A number of the projects examined in the case studies involved upgrading of sewers and water distribution systems, and were carried out at the same time as road reconstruction. This co-ordinated approach contributed to significant energy savings, and demonstrates an unintended benefit of the GTF by giving municipalities the flexibility to choose the categories that work best for them. This, combined with the additional flexibility provided by being able to “bank” funding for future projects is resulting in more comprehensive asset management by municipalities.

5.0 Cost-Effectiveness

Are the most appropriate and efficient means being used to achieve objectives?

5.1 How cost-effective are the GTF and PTF?

5.1.1 *How cost-effective are the GTF and PTF in terms of program management and control?*

Evidence from the document review and interviews shows that program management and internal controls by AMO and Infrastructure Canada for the GTF and PTF have been generally effective and low cost.

The June 18, 2008 Implementation Evaluation of the GTF (Survey Results – Ontario) found that there are sufficient internal controls to ensure that the GTF is administered properly and achieves program objectives. Further evidence is provided by a KPMG compliance audit for 2007, which found that none of the municipal annual audits identified material non-compliance

Interviewees all agreed that management and control of GTF and PTF have been very cost effective. AMO devotes two staff to the management of GTF at a cost of less than 1% of funds allocated. Interviewees agreed that the administrative costs of these programs were much less than other application-based funding programs and would like to see this model used for future programs.

However, it is important to note that this analysis does not include the cost to municipalities to administer the projects and meet reporting requirements.

5.1.2 *How cost-effective are the GTF and PTF in terms of funding allocation or delivery mechanisms?*

Based on evidence provided from documents, interviewees, survey respondents and the case studies, the funding allocation and delivery mechanisms are generally cost-effective. However, there is a number of suggestions for change to both the funding allocation and delivery mechanisms. Many of these have been discussed in previous sections.

As shown in the financial statements for 2007, the cost of delivery by AMO is less than 1% of total funding allocations. However, the Oversight Committee meeting of December 17, 2007 included discussion about the significant costs to municipalities receiving the funding to undertake compliance audits. This is a particular concern for those municipalities receiving small allocations.

While most interviewees agreed that the present funding formula based on a per capita allocation was fair and straightforward, changes were suggested by some. Updating the present baseline which uses 2001 census data was one suggestion. Others expressed

concern about using the present funding formula for small and rural municipalities. Rural municipalities often have a small population and large geographic area, with many roads and bridges. Some tourist areas have small permanent populations and high seasonal populations which lead to infrastructure costs out of proportion to the total population. To address these concerns, some suggested adjusting the per capita formula to provide a minimum level of base funding for all municipalities. Some municipalities received as little as \$975 in one year and a little more than \$8,000 over the five years of the Agreement.

Other suggestions to improve the funding allocation and delivery mechanisms for the GTF include:

- < Align the reporting time frame with the municipal financial reporting cycle;
- < Address issue of costs of audit fees for small municipalities (e.g. allow the Municipal Treasurer to provide a certified sign off for small allocations);
- < Include adjustment for inflation in funding formula;
- < Allow municipal employees to perform work where it is more cost-effective; and
- < Broaden criteria for eligible projects beyond the present focus to address economic/cultural sustainability pillars.

Survey respondents also provided input. They were asked to identify other infrastructure programs similar to GTF and PTF. The large majority did not know of any comparable programs, as only 21 identified other similar programs. When survey respondents were provided with a brief description of the GTF and PTF funding allocation and program delivery approaches, 75% said that, overall, they were the most cost-effective approaches, and a further 12% were not sure. Only 13% of respondents said that it was not the most cost effective approach. These respondents provided suggestions for improving the cost-effectiveness of the programs. Most suggestions, such as using newer census data and changing the funding formula, were the same as those provided by interviewees. A couple of people suggested giving the funding directly to the municipalities rather than using AMO as an intermediary.

Survey respondents were also asked what suggestions they would make for improvement. Almost half, 45% had no suggestions. Most other suggestions have already been discussed. They include:

- < Reduce the reporting burden;
- < Change the funding formula, or how the funding is allocated;
- < Have more flexible criteria for eligible projects;
- < Provide more money; and

< Make the program permanent.

The case studies also provided input. The County of Frontenac case study showed that the ability to bank the GTF funding provided the municipality with flexibility in the timing of the use of the funds, which enabled them to use the funds more effectively, after completing their ICSP. The wide variety of funding categories also provides municipalities with flexibility in the use of funds and the ability to match the selection of projects to priorities.

However, the case studies also provided insight into the issue of the reporting burden. Most municipalities had difficulty in providing detailed evidence of the impacts of projects in terms of energy savings, improved water quality, reduced pollution and other impacts. In some cases, detailed quantitative evidence is not possible. It also appears that reporting on outcomes is a relatively new requirement for many municipalities and that they do not normally provide such information to their senior managers. There is also a sense that they find the reporting to be a burden with little benefit. In fact, in one case, the municipality plans to concentrate the use of GTF funding on a few projects in order to reduce the reporting burden. In another, to minimize the reporting burden, the municipality intends to concentrate its use of GTF funding on roads, as the only reporting requirement is to determine the amount of paving done, and use the AMO formula to determine the energy savings.

6.0 Conclusions and Recommendations

The evidence presented in this report supports the following conclusions and recommendations.

Table 14: Conclusions and Recommendations

Conclusions	Recommendations
Success / Progress	
<p>1. There is a high level of satisfaction with the GTF with respect to the process for negotiating the Agreement, project categories and eligibility criteria, as well as with the role of the AMO in the administration of the fund. However, smaller municipalities are less satisfied with some of the reporting requirements, in particular the annual audit statement requirements.</p>	<p>1. Due consideration should be given to risk-based audit requirements. Given the cost of preparing annual audited financial statements and since the financial risks associated with misuse of funds in municipalities receiving limited financial support, audits could be required only for those municipalities who received a certain minimum amount of funding. If the risks associated with misuse of funding are nonetheless deemed unacceptable, less frequent audits could be required of smaller communities.</p>
<p>2. Although funding available through the PTF was appreciated, there was less satisfaction with the PTF due to its limited one time availability and disappointment that it has not been continued.</p>	<p>As this was one-time funding, no recommendation is required.</p>
<p>3. In Ontario, more than 1,000 green infrastructure projects have been funded through the GTF and PTF since the programs began. These projects have significantly contributed to new and improved municipal infrastructure such as roads, bridges, street lighting, furnaces, buses, and many others. In the majority of cases, projects have demonstrated expected results. There has been a good alignment between the projects selected, program categories and benefits. The needs of municipalities have, to a fair extent, been met through the existing program categories. Nonetheless, some would like to see recreational and other types of infrastructure included in the eligible project categories.</p>	<p>2. The GTF should continue to offer a wide range of potential project categories, particularly in light of the fact that the municipal projects are achieving the intended results and benefits. Notwithstanding the possible overlap with other existing programs, consideration should be given to adding other types of infrastructure, provided the project results are well aligned with program objectives.</p>
<p>4. Only a portion of the GTF and PTF projects undertaken have been completed. Nevertheless, the majority of completed projects have resulted in environmentally sustainable municipal infrastructure. However, a significant proportion of the projects undertaken were in the local roads and bridges category. While there is some evidence of environmental benefits resulting from these types of projects, other project categories are better aligned with environmental benefits. Environmental monitoring for roads and bridges is not required as is the case in other project categories.</p>	<p>3. Given the pressing needs of municipalities, it is important that the GTF continue to support projects in the local roads and bridges category. However, consideration could be given to limiting the proportion of GTF funding going to local roads and bridges projects to ensure municipalities invest funds in projects that make significant contributions to environmental benefits.</p>

Table 14: Conclusions and Recommendations

Conclusions	Recommendations
<p>5. A requirement for municipal plans is incorporated into the Agreements for the GTF and PTF. AMO has also taken steps to provide guidance to municipalities in the development and enhancement of Integrated Community Sustainability Plans. The predictability of the GTF funding has improved the ability and confidence of municipalities to establish longer term capital plans and set priorities for addressing infrastructure needs. In terms of specific projects, there have been a limited number that fall within the category of capacity building. The nature of these projects is varied and includes projects such as asset management systems, environmental assessments and official plans.</p>	<p>No recommendation is required.</p>
<p>6. The PTF helped municipalities advance projects identified within transit plans. Para transit and rolling stock were identified as the most important needs. Given that the PTF was one-time funding, there are significant transit needs that were not met under this program, but this is not due to the lack of flexibility of the program. Nevertheless, the PTF contributed to long-term sustainability planning due to the requirement for eligible communities to submit a comprehensive transit strategy and a 10-year Transit Asset Management Plan.</p>	<p>As this was one-time funding, no recommendation is required.</p>
<p>7. Since there is a built-in requirement in the Agreements for both the GTF and PTF to produce incremental capital spending on municipal infrastructure, it is not surprising that the programs have resulted in incremental capital spending. This incremental spending has originated from all orders of government. On average, an additional \$3.75 has been provided by other sources of funding for every \$1.00 of GTF funding. Similarly, the amount is \$4.00 for every \$1.00 of PTF funding.</p> <p>At the project level, if the GTF and PTF had not been available, the vast majority of municipalities would either not have undertaken some or all of these projects or the projects would have been delayed or scaled back in terms of scope and / or quality.</p>	<p>4. There should continue to be a requirement for projects undertaken under the GTF to be incremental capital spending on municipal infrastructure. AMO should monitor the amount of capital spending undertaken by municipalities in Ontario to ensure that the incrementality requirement continues to be met as it will become more difficult to assess this once the program has been in place for several years.</p>

Table 14: Conclusions and Recommendations

Conclusions	Recommendations
<p>8. The GTF and PTF have contributed to meeting provincial and municipal objectives related to overcoming the outstanding infrastructure deficit by: infusing the capital needed to enable more timely completion of infrastructure projects; demonstrating that municipalities can use federal funding in a cost-effective and accountable way; providing flexibility in terms and conditions; and enhancing existing planning processes.</p>	<p>No recommendation is required.</p>
<p>9. The GTF fostered collaborative approaches across the orders of government. In particular it helped to strengthen new relationships between the federal and municipal orders. The agreement itself was developed in a collaborative way with Infrastructure Canada, Ontario, AMO and the City of Toronto participating in the process. The province was at the table, but not to negotiate on behalf of municipalities. Collaboration is evident in the governance structure of the program as well as in decisions that have been made with respect to communication plans, planning and reporting approaches and the development of outcomes indicators. There was also collaborative engagement of various funding partners in undertaking a significant number of municipal infrastructure projects.</p>	<p>No recommendation is required.</p>
<p>10. The GTF and PTF have demonstrated significant benefits with very few adverse effects. The programs have demonstrated that it is both positive and desirable to have federal / municipal relationships. Municipal actions align with national priorities in areas such as infrastructure and sustainability. Due to the fact that the GTF funding allocation formula is based on population, the smaller municipalities receive much more limited funds. Concern has been expressed that funding to the smaller municipalities is not enough due to large geographic areas, and in some cases, high seasonal populations. A capacity challenge for some smaller communities lies in meeting the reporting and audit requirements.</p>	<p>5. AMO and Infrastructure Canada should review the possibility of establishing a base funding amount over and above the per capita funding allocation to more adequately address the municipal infrastructure needs of smaller and rural municipalities.</p> <p>6. AMO and Infrastructure Canada should update its per capita funding formula regularly to reflect more recent population data.</p> <p>7. As per recommendation 1, AMO and Infrastructure Canada should review the requirement for independent compliance audit for funds under a certain threshold and consider using a certified sign-off by the municipal treasurer for smaller funding allocations.</p>
Cost-Effectiveness	
<p>11. AMO's program management and control of the GTF and PTF funds has been very cost-effective.</p>	<p>8. AMO's program management and control process should be used as a model for future programming.</p>

Table 14: Conclusions and Recommendations

Conclusions	Recommendations
<p>12. The funding allocation and delivery mechanisms are cost effective due to very low administrative costs associated with the GTF (1%) and PTF (1.7%).</p> <p>However, the cost of compliance audits is an issue for some smaller municipalities. There are also concerns about the burden caused by the need to report on outcomes.</p> <p>There is also some concern with the per capita funding formula for the GTF which is problematic for smaller municipalities.</p> <p>Additionally, there is some concern that the inability to use municipal employees on projects without prior approval from the Oversight Committee makes it more difficult for municipalities to effectively make use of this option and leads to a less cost-effective approach.</p>	<p>See previous recommendations (#1, 6 and 7).</p> <p>9. AMO and Infrastructure Canada should review the terms and conditions relating to the use of municipal employees to perform work on infrastructure projects where it may be more cost-effective to do so. It may be more effective to include clear guidelines on when and how municipal employees can be used rather than requiring prior approval from the Oversight Committee.</p>

In addition to the recommendations presented above which are linked to a specific conclusion, the following recommendation is of a more general nature:

10. AMO should be commended for its effort in obtaining outcomes data from municipalities on completed projects. However, AMO should ensure that its outcomes reporting requirements do not unduly affect the decisions of municipalities to undertake certain types of projects to the detriment of other priorities because reporting is easier. AMO should therefore review the outcome reporting requirements to ensure that they provide the required information at the lowest cost to the municipalities. AMO should also put in place a mechanism for ensuring that only those fields which are applicable to the project are completed by municipalities.

Annex A – GTF and PTF Joint Evaluation Matrix

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
Success / Progress: What is the success / progress achieved to date? Are there any indicators that the programs are encountering problems that prevent them from meeting their objectives, within budget and without unwanted outcomes?						
1. What is the level of satisfaction with the GTF and PTF programs for recipients and ultimate recipients within each jurisdiction?	Opinions of initial and ultimate recipients Opinions of Oversight Committee members	Low		Medium	High	Medium
2. a. What have been the results of the GTF and PTF projects so far in terms of completed infrastructure? b. Is there a good alignment between the projects selected versus category versus benefits?	# and value of GTF and PTF projects completed as planned by eligible investment categories # of projects completed as planned by intended program outcomes # of projects selected that do not correspond to the category and benefits	Low	High	Medium	High	Medium

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
3. Did the GTF and PTF programs result in environmentally sustainable municipal infrastructure?	<p># and value of projects by investment category and by environmental outcome</p> <p># of projects that did not respect eligible categories (or that do not lead to GTF environmental outcomes)</p> <p>Improvements to water quality</p> <p>Improvements to wastewater collection and treatment</p> <p>Reduced per capita tonnage of solid waste sent to landfill</p> <p>Reduced energy consumption and improved recovery and recycling</p> <p>Improvements to transit infrastructure, efficiency and usage</p> <p>Opinions of initial and ultimate recipients</p> <p>Opinions of INFC Operations</p> <p>Opinions of representatives of community and / or environmental groups</p>	Medium	High	High	High	High
4. Did GTF and PTF contribute to increased planning capacity of municipalities?	<p>Funds spent on capacity building</p> <p># and type of capacity building projects</p> <p>Opinions of ultimate recipient and municipal associations on the benefit of capacity building funds</p>	Medium	Medium	Medium	Medium	Medium

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
5. Are there priority municipal infrastructure needs that have not been met by GTF and if so, why not? (e.g., additional eligible project categories)	<p># of municipalities that could not build the top 10-25% of projects on their infrastructure plan or major infrastructure projects on their plan</p> <p>Municipal leaders / associations identify infrastructure needs that have not been met</p> <p>Opinions of representatives of community and / or environmental groups</p>	Low	Low	Medium	Medium	
6. Are there priority transit infrastructure and transit management needs that have not been met under PTF, and if so, why not?	<p># of municipalities that could not implement the top 10-25% of transit projects on their transit infrastructure plan or major transit projects on their plan</p> <p>Municipal associations identify transit infrastructure of management needs that have not been met</p> <p>Opinions of representatives of community and / or environmental groups</p>	Low	Low	Medium	Medium	

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
7. Have the GTF and PTF produced incremental capital spending on municipal infrastructure?	<p>Total value of municipal infrastructure spending (through federal GTF and PTF contributions and other contributions from provinces, territories or private industry)</p> <p>% of funds leverages from other sources for projects using GTF or PTF</p> <p>Average annual capital spending on municipal infrastructure by initial and ultimate recipient over the period of April 1, 2005 and March 31, 2010 greater than the base amount (provided by GTF & PTF)</p> <p>% increase in federal infrastructure spending over period of gas tax agreements</p> <p>Initial recipient did not reduce, eliminate or claw back any municipal infrastructure funding currently being made available to ultimate recipients</p> <p>Opinions of initial and ultimate recipients</p> <p>Opinions of INFC Operations</p>	Low	High	Medium	High	Medium

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
8. Did the GTF and PTF programs contribute to municipal long term sustainability planning?	% of ultimate recipient who have an ICSP developed through a public process % of ultimate recipient who expect to complete an ICSP within the next 5 years % of ultimate recipients (local governments) that have completed a CIP % of transit plans in place Projects completed contained in sustainability plans Recipients report improved long term infrastructure investment decisions % of local governments that have adopted and use the accounting rules of the Public Sector Accounting Board Opinions of initial and ultimate recipients Opinions of municipal association representatives	Low		Medium	Medium	Medium
9. a. Have the programs met provincial and municipal objectives? b. Have the optional commitments under GTF chosen by the province been met, and what were the results / impacts?	Comparison of province objectives planned vs. achieved Comparison of commitments made in agreements and those met Opinions of INFC staff Opinions of initial recipients	Medium		Medium		

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
10. Did the GTF foster collaborative approaches across all orders of government?	<p>Types of support offered by INFC to initial recipients and initial recipient to ultimate recipients</p> <p># and type of issues raised and resolved between federal, provincial, territorial and municipal stakeholders</p> <p>Time taken to resolve issues</p> <p>New collaborative approaches or mechanisms introduced</p> <p>Opinions of INFC staff, initial recipients and ultimate recipients</p> <p># of inter-municipal and municipal-First Nations reserve collaborations on Eligible Projects</p> <p>Opinions of local government representatives</p>	Medium	Medium	Medium	Medium	Medium

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
11. What other effects, both beneficial and adverse, have the GTF and PTF programs had on recipients of funding? a. Are some recipients of funding affected more by the program than others? b. Are there some effects due to limited capacity?	Description of other, unanticipated effects or outcomes in reports on projects Opinions of initial, ultimate recipients and municipal associations on the effect GTF and PTF funded projects have had on both initial recipients and ultimate recipients Opinions of INFC Operations Opinions of representatives of community and / or environmental groups # and value of projects undertaken sooner because of GTF and / or PTF	Medium		Medium	Medium	Medium

GTF and PTF Joint Evaluation Matrix

Issues	Indicators	Data Collection Methods				
		Document / Literature Review	Data Analysis	Interviews	Survey	Case Studies
Cost Effectiveness: Are the most appropriate and efficient means being used to achieve objectives?						
12. How cost effective are the GTF and PTF in terms of: a. Program management and control? b. Funding allocation or delivery mechanisms?	Feasibility of reducing program costs Administration costs (federal, initial, ultimate recipients by project and by outcomes achieved) Cost of delivery of GTF / PTF compared to other federal (provincial / territorial) infrastructure projects, transfer payments or grants Cost of program vs. leveraging impact Cost of collaboration aspect of program Comparison of GTF and PTF with other infrastructure programs within the jurisdiction Allocation of funds versus funds disbursed # and % of municipalities entitled to funding that did not receive funding Inefficiencies noted and recommendations for change made by Oversight Committee / initial recipients / ultimate recipients Opinions of initial and ultimate recipients and municipal associations Opinions of INFC Operations and Policy	Low	Medium	Medium	Medium	Medium

Annex B – Infrastructure Results of GTF and PTF Projects

Infrastructure Results of GTF Projects for Ontario Municipalities Except for Toronto

Infrastructure Results	# of Projects Resulting in this
Community Energy Systems	
Lighting	7
Traffic signals	6
Roof	6
Furnace	5
Facility / building	4
Heating system	4
Cooling systems	4
Windows	3
Doors	3
Insulation	3
Boiler	3
Electrical	2
Pipes	2
Other types (e.g. energy system, water system, humidification system, new equipment)	1 of each
Total Community Energy Systems	50
Local Roads and Bridges	
Road resurfacing	343
Road reconstruction / rehabilitation	237
Road drainage / culverts	177
Sidewalk construction	46
Curb and gutter replacement	44
Bridge replacement / construction	41
Bridge repair	28
Traffic signal improvements / upgrades	18
Truck / vehicle purchase	7
Road extension / new road construction	6
New facility / facility repairs	6
Bike lanes	5
Install turning lanes	4
Street lighting upgrade	3
Equipment purchase	3

Infrastructure Results of GTF Projects for Ontario Municipalities Except for Toronto

Infrastructure Results	# of Projects Resulting in this
Other types (e.g. roundabout construction, retrofitting salt applicators, salt management plan, retaining wall)	1 of each
Total Local Roads and Bridges	641
Solid Waste	
Landfill site enhancements, including capital work, expansion, waste cells	8
Landfill recycling containers	6
Organic waste collection program, including bins	5
Recycling or composting facility	5
Site closure	4
Landfill monitoring	3
Residential recycling bins	2
Vehicles, including compactor collection vehicles and specialized waste vehicle	2
Other types of projects (e.g. pesticide collection, transfer station, aerobic system, equipment garage, methane gas collection system, terms of reference for landfill, waste management plans).	1 of each
Total Solid Waste	42
Public Transit	
Sidewalks (new or improved)	20
Trails or bikeway improvements	12
Facility or terminal or other infrastructure	11
Bus acquisition (new, used, Smart bus)	10
Pedestrian bridge	4
Transit information technology	4
Bus maintenance	4
Bus shelter improvements	3
Fare collection system	3
Transit projects or special studies	3
Transit communication system	2
Other types (bus security system, public bikes)	1 of each
Total Public Transit	91
Wastewater	
Storm sewer construction	20
Sanitary sewer construction	19
Treatment facility improvements	16

Infrastructure Results of GTF Projects for Ontario Municipalities Except for Toronto

Infrastructure Results	# of Projects Resulting in this
Storm water separation	7
Sewer inspection	4
Manhole construction	3
Curb and gutter	3
Lift station	2
Sewage lagoon treatment	2
Storm pond management	2
Other types (sewer maintenance and a catch basin)	1 of each
Total Wastewater	82
Water	
Water main construction	26
Distribution system improvement	10
Facility	7
Water treatment	7
Hydrant replacement	3
Water main inspection	2
Water meter replacement	2
Clean-up / improve water quality	2
Water tower improvements	2
Tank improvements	2
Other types (e.g. retaining wall improvements, security)	1 of each
Total Water	67

Infrastructure Results of PTF Projects for Ontario Municipalities Except for Toronto

Infrastructure Results	# of Projects Resulting in this
Intelligent Transport Systems	
Surveillance equipment	2
Signage and communication materials	2
Smart bus technology	1
Transit system	1
Customer call system	1
Smart card / fare collection system	1
Total Intelligent Transport Systems	8
Para Transit	
Buses including para transit buses / vehicles	5
Vans	3
Website	1
Total Para Transit	9
Related Capital Infrastructure	
Bus terminal	5
Bus shelters	1
Replacement of underground storage tanks	1
Roof	1
Heating and cooling system	1
Heaters in transit vehicle storage area	1
Total Related Capital Infrastructure	10
Rolling Stock	
Purchasing of buses	16
Transit ridership growth	1
Total Rolling Stock	17
Other	
Purchase of two cars and a minivan	1
Total Other	1