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Does the Province have enough financial and statistical data available to execute a needs-based grant allocation to target municipal infrastructure investment instead of utilizing an application process to allocate funds?

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Does the Province have enough financial and statistical data available to execute a needs-based grant allocation to target municipal infrastructure investment instead of utilizing an application process to allocate funds?

An Investigation into the Effectiveness of the Application-Based Approach to the Re-Distribution of Revenues or Intergovernmental Transfers from Senior Levels of Government to Local Governments

MPA Research Report

Submitted to:

The Local Government Program
Department of Political Science
The University of Western Ontario

Brenda Garrett
July 2017

Executive Summary

Municipalities across the Province are grappling with infrastructure deficits. Small, northern, and rural municipality's tax assessment base limits its ability to garner sufficient revenue to support operations as well as renew and replace infrastructure. Federal and Provincial governments must step in and assist. As a result the Province introduced the Ontario Community Infrastructure Fund (OCIF) as a permanent program to fund critical infrastructure projects for core assets - roads, bridges, water and wastewater.

This research paper seeks to determine if the Province can efficiently and effectively re-distribute revenue using existing financial and statistical data to local governments and to investigate the effectiveness of an application-based approach for infrastructure grants.

Acknowledgements

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I am so blessed to have two of the brightest and smartest men for sons, Brent and Craig Asselin. Thank you for your encouragement and honest criticism. I know that you were only trying to ensure that I didn't get too "mathy" and reach beyond my comfort zone. Your data mining skills and math advice were awesome. Everyday you amaze me with what you can do and what you know.

And finally, my husband Steve Flanagan, thank you for letting me complete the Master of Public Administration program. Now that it's done, let's enjoy the farm, our standard poodle Mac, and our friends. I promise you this, no more school!

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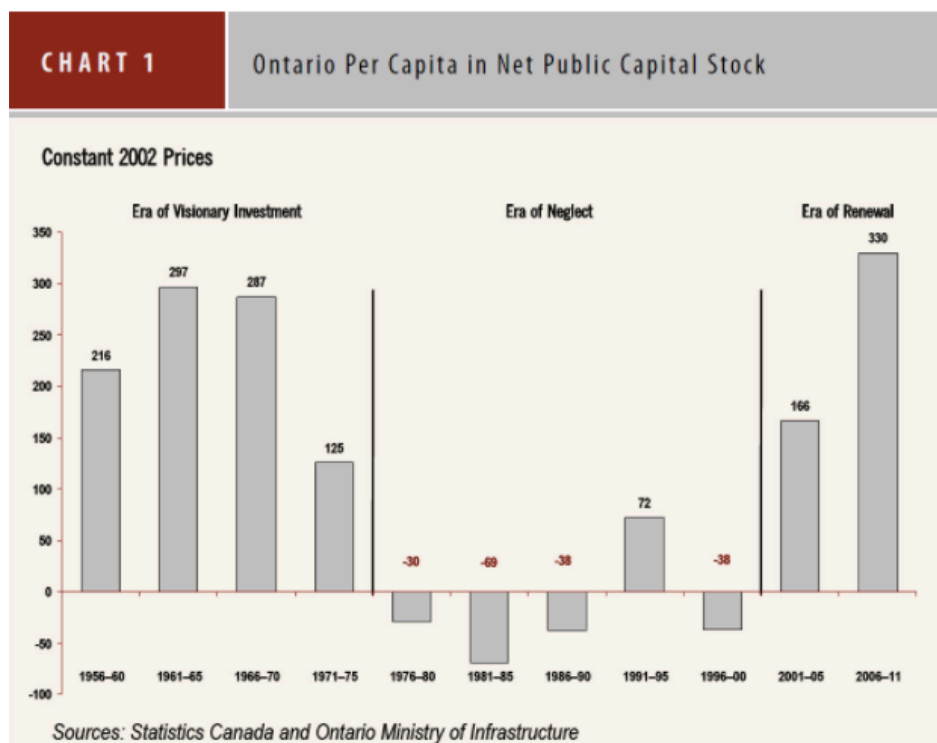
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Introduction

Municipalities own the vast majority of Canada’s infrastructure assets but have very few revenue tools, mainly property taxes and user fees, to raise funds for the maintenance, replacement, and construction of capital assets. “Municipalities own over 60% of the country’s infrastructure but collect just eight cents of every tax dollar paid in Canada, with the other 92 cents going to federal, provincial and territorial governments” (Federation of Canadian Municipalities, 2015).

Underinvestment in public infrastructure has created municipal infrastructure deficits across the province. The chart below (Ontario, 2016) outlines capital spending from 1956 to 2001 and highlights the: 1) era of visionary investment, 2) era of neglect, and 3) era of renewal.



The chart demonstrates a significant investment per capita in infrastructure from 1956 to 1975, which defines the era of visionary investment. However, for the 25-year period between 1976 and 2000, the era of neglect, infrastructure spending per capita was primarily nonexistent. “For 25 years Canadians have watched the symptoms of the infrastructure deficit grow: rusting bridges, crumbling roads, crowded buses and subways, and thousands of drinking water warnings” (Federation of Canadian Municipalities, 2015). Well-maintained public infrastructure is necessary for the health of the economy and quality of life.

Grants from senior levels of government are important to the fiscal health of local governments. It can be argued that a municipality has taxing authority and can raise funds for infrastructure investment through property taxes, but the ability of a small municipality to raise sufficient funds for infrastructure is limited by its assessment base. Equalization payments through grants or intergovernmental transfers from senior levels of government are required to assist municipalities with infrastructure needs. It can also be argued that municipalities are the creation of the Province and must be accountable to the Province but where does that leave the role of municipal councils and residents in shaping their communities.

The following research paper is an investigation into the effectiveness of the application-based approach to the re-distribution of revenue or grants from senior levels of government to local governments. The goal of the research is to determine if the Province has enough data, both financial and statistical, to allocate funding for infrastructure needs using a needs-based grant allocation. Based on this information, this paper poses the following research question.

Research Question

Does the Province have enough financial and statistical data available to execute a needs-based grant allocation to target municipal infrastructure investment instead of utilizing an application process to allocate funds?

This paper will be structured as follows:

1. **Background** – A comprehensive background will be provided including examples of successful grants, evidence of municipal reporting burden, and current tools to mitigate infrastructure deficits.
2. **Methodology** – A detailed account of the design and data used to answer the research question will be provided in this section.
3. **Results and Interpretation of Data** – All data collected will be presented and organized. This section will also include interpretation of the data.
4. **Conclusion** – This section will provide final thoughts on the research and proposed recommendations for the Province.

Municipalities are creations of the Province. The Province enacts boundaries, mandates responsibilities, sets standards for service delivery, limits own-source revenues to property taxes and user fees, and establishes borrowing limits for municipalities. “The good news is that the high degree of provincial control over local governments in Canada means that there cannot be any visible fiscal crisis at the local level” but “the bad news, however, is that municipal governments in Canada have only very limited fiscal autonomy and are constrained from solving the problems they may have” (Slack E. , Provincial-Local Fiscal Transfers in Canada,

2009). This research is important because it explores whether there is a method available, using existing data, to balance control of municipal spending and garner efficiencies for revenue re-distribution for senior levels of government, while at the same time allowing municipalities the ability to solve local infrastructure deficits.

Background

The following is a comprehensive background on Federal and Provincial grants including a discussion of grant structure, examples of grants, municipal reporting to the Province, tools to mitigate infrastructure deficits, and the new Ontario Community Infrastructure Fund which is the focus of the research. This section of the paper will include a discussion on grant structure, intergovernmental transfers, federal and provincial grants, municipal reporting, and tools to mitigate infrastructure deficits. The background will provide insight into grant administration and potential obstacles with the current granting system.

Grant Structure

Grants or intergovernmental transfers from senior levels of government are divided into two categories, conditional/earmarked and unconditional. Unconditional grants have an income effect on local governments and conditional grants have both a price and income effect (Slack E. , Local Fiscal Response to Intergovernmental Transfers, 1980). Therefore the donor government will select either a conditional or unconditional grant depending on the senior level government's desired local fiscal response.

Literature regarding grants and intergovernmental transfers is extensive. Shah and Slack argue provincial-municipal transfers are designed to address the following issues: 1) vertical fiscal imbalance, 2) horizontal fiscal imbalance, 3) externalities, and 4) as a response to political lobbying or to exert control (Shah, 2007) (Slack E. , 2007).

Vertical Fiscal Imbalance

“A vertical imbalance occurs when municipalities have inadequate own-source revenues to meet expenditure responsibilities” (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009, p. 17). The fiscal gap can be closed by the use of an unconditional or conditional grant or by revenue sharing. If the grant is unconditional the funds can be spent at the municipality’s discretion. Conditional grants must be spent on provincially or federally mandated projects. The grant is typically allocated using a formula but to be an effective tool to increase municipal revenues, the allocation must be stable and predictable (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009). An example of a conditional vertical fiscal grant is Ontario’s commitment to share 2 cents per litre of gasoline revenue with municipalities for public transit (Toronto Transit, 2015).

Horizontal Fiscal Imbalance

“Horizontal fiscal imbalance refers to the difference in resources among governments at the same level” (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009, p. 19). Municipalities across the province have very different characteristics, which can limit its ability to raise the necessary resources to deliver consistent and comparable levels of service. Equalization payments are required in order to ensure comparable levels of service are delivered across the province. Formulas are used to determine equalization allocations but allocations must be stable and predictable to ensure province-wide comparable services (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009).

Externalities

Externalities occur when the benefit and cost of a service cascades over multiple municipal boundaries. Externalities may result in under spending due to perceived benefits accruing outside municipal boundaries, for example, regional roads. To diffuse the effect of externalities, the province will utilize conditional, matching grants (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009).

Political

“Transfers are sometimes established in response to successful lobbying by municipal associations” but frequently “provincial governments often use transfers as a way to exert control over how municipalities deliver services” (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009, p. 23). Conditional grants that do not require matching funds are an excellent tool to fund projects that are a priority for the province but a low priority for a local government, for example the delivery of land ambulance that was downloaded to the local level in 1998. Conditional non-matching grants encourage “local governments to act as agents of the donor government” (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009, p. 23). The Province sets service standards for the project or program and the Province also benefits from the program being delivered locally (Boadway & Shah, 2009).

Through the use of different grant structures the Province can exert control over expenditures at the local level. This is important because municipalities are creatures of the Province and act as agents of the Province when providing services to residents. Even with grants as a mechanism to ensure service standards are achieved, there are still obstacles related to intergovernmental transfers.

Intergovernmental Transfers

Transfers need to be designed to ensure recipients have a clear mandate, and have some flexibility to make decisions but are held accountable for spending decisions (Bird & Vaillancourt, 1998). Yet, there are still obstacles to overcome with grants.

In a paper prepared for a 2009 Conference on Grants vs. Earmarked Grants: Theory and Practice titled *Provincial-Local Fiscal Transfers in Canada: Provincial Control Trumps Local Accountability*, author Enid Slack discusses intergovernmental transfers and “evaluates the extent to which they are designed to increase local accountability or maintain provincial control” (Slack E. , *Provincial-Local Fiscal Transfers in Canada: Provincial Control Trumps Local Authority*, 2009, p. 2). Slack’s paper concludes that based on her research, grants are designed to achieve provincial objectives not local fiscal autonomy.

Slack argues that potential obstacles for grants include: 1) interference with efficient delivery of service, 2) local decision making distortion, 3) reduced accountability, and 4) the fact that transfers are rarely stable and predictable.

Interference with efficient delivery of service: Slack’s research finds that transfers interfere with the efficient delivery of services. Slack contends that there is no incentive for municipalities to use proper pricing for services if grants cover a large portion of operating and capital costs.

Local decision making distortion: Transfers can distort decision-making at the local level. In order to qualify for a grant, projects that are not a real priority for the

community may get prioritized over other projects in an effort to garner any amount of grant funding.

Reduced accountability: Transfers can reduce accountability. Slack argues that accountability can be blurred when municipalities are making spending decisions while another level of government is raising the funds.

Transfers are rarely stable and predictable: The final and most important issue that Slack identifies relating to transfers is that they are rarely stable and predictable, which makes planning for infrastructure improvements at the local level difficult.

Federal and Provincial Grants

Senior levels of government have introduced various grants to assist municipalities with operating and capital funding and to address the revenue imbalance between the levels of government. Two of these grants are Canada Gas Tax, and Ontario Municipal Partnership Fund (OMPF).

Canada Gas Tax

The Canada Gas Tax fund, a conditional federal grant administered by the Association of Municipalities of Ontario (AMO), was introduced in 2005 and has become a stable and predictable source of funding to assist municipalities with infrastructure investments. Funds are allocated on a per capita basis and municipal allocation estimates are available to 2018. Estimates from 2019 to 2024 will be based on the 2016 census. There is a requirement to identify municipal infrastructure projects that will be funded by Canada Gas Tax and to report the performance measures and outcomes achieved. With a stable and predictable flow

of funding, Municipal Councils and staff can plan for important infrastructure investments well into the future.

The Canada Gas Tax fund has matured. Municipalities were once required to hire external auditors to confirm that Gas Tax funding was used appropriately and in accordance with agreements. In 2009, Infrastructure Canada conducted a program evaluation on the Gas Tax fund and found that the program “addressed a demonstrated need for investment in municipal infrastructure, and provided flexibility and predictability to local governments” and was “found to be efficient cost-effective and accountable” (AMO, 2017). As a result of the positive evaluation results, the audit scope migrated from the conventional audit approach to a risk based audit approach. Now AMO randomly audits only 10% of municipalities to ensure compliance with the program.

Canada Gas Tax provides a stable, predictable, and flexible funding source for municipal infrastructure needs. It has reduced the reporting burden for a municipality because it does not require an application process to compete for funds and recently, the requirement of a financial audit to ensure compliance has been discontinued. The grant is also easy to administer for the federal government because AMO oversees the program. AMO is an association of Ontario municipalities that works together to achieve goals and meet common challenges. Grant allocations are formula-based and are allocated based on recent census population data.

Ontario Municipal Partnership Fund

The OMPF grant has been assisting municipalities since approximately 2003. It is an unconditional grant and it is the Province’s main transfer payment to 388

municipalities. The total funding envelope for 2017 is \$505 million and the Province has made a commitment to continue this grant into the future. In 2014, the grant was redesigned to focus assistance on northern and rural municipalities with challenging fiscal circumstances. OMPF has four grant components: 1) assessment equalization, 2) northern communities grant, 3) rural communities grant, and 4) northern and rural fiscal circumstances grant. The Province uses a number of data inputs and measures to allocate funds across the 388 participants. For example: number of households, weighted tax assessment per household, rural and small communities measure, farm measure, northern and rural fiscal circumstances measure, guaranteed level of support, and the prior year allocation. Since the grant is unconditional there is no special reporting for spending, no audits to comply with, applications to complete, or municipal competition for funds.

The benefit of OMPF is that it targets small, rural and northern municipalities but uses data to quantify the allocation per municipality. It does not have complex reporting requirements such as an application process to compete for funds. Administration is easy for the province due to the formula-based allocation of the funds. Allocation of the grant and formulas are posted on the web making the process very transparent and defensible.

Canada Gas Tax and OMPF are predictable, long-term, and stable revenue sources for municipalities. Both grants are targeted to specific municipal needs. All municipalities receive Canada Gas Tax funds and it must be spent on municipal infrastructure. Only 388 municipalities receive OMPF but the grant is targeted to assist northern and rural municipalities with challenging fiscal circumstances. Both

grants have minimal reporting requirements, which reduce the reporting burden on municipalities. More importantly, both Canada Gas Tax and OMPF allocate funds based on available financial and statistical data (AMO, 2017) (Ontario, 2016).

Municipal Reporting

Over time, provincial reporting requirements for municipalities has increased. New provincial programs and grant applications have made reporting more complex for municipalities. “Steadily municipalities became deeply over regulated and burdened with requirements to report to the province on hundreds of programs and services” (Lobo, 2017, p. 25). “Reporting threatens to weaken municipal productivity at a time when municipalities must modernize to face increasing demands” (Lobo, 2017, p. 25).

Conditional grants can have significant reporting requirements when compared to the reporting requirements for unconditional grants. Many conditional grants require formal expressions of interest, complex applications, municipal competition for funds, senior government review and ranking, grant financial audits, and final project reporting. Reporting to senior levels of government has become burdensome for municipalities when the average resident is more concerned with what is tangible and visible such as good roads and garbage pickup (Lobo, 2017).

Lobo argues that municipal reporting to the Province is “onerous and excessive” (Lobo, 2017, p. 26) and has surveyed municipalities across the province. Figure 1 (Lobo, 2017, p. 25) demonstrates that 48% of respondents agree that Provincial reporting requirements are impacting the ability of municipal practitioners to productively deliver services.

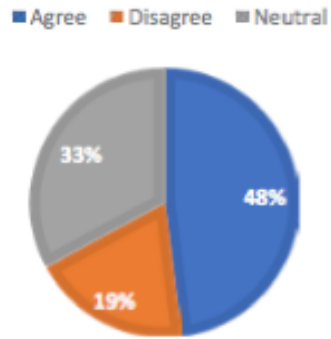


Figure 1: Survey responses indicate whether reporting requirements impact the ability of municipal practitioners to productively deliver services

Tools to Mitigate the Infrastructure Deficit

Together the Province and municipalities have developed tools to mitigate municipal infrastructure deficits by using: 1) capital asset inventories and amortization, 2) long-range capital plans, and 3) asset management plans.

Capital Asset Inventories

A municipality's capital assets are an important economic resource and are fundamental to the delivery of municipal programs and services. In recognition of the importance of tangible capital assets (TCA), the Public Sector Accounting Board (PSAB) issued new financial reporting standards, section 3150 of the PSAB handbook, with respect to municipal assets. As of January 1, 2009, PSAB required that all TCA be recorded and amortized for municipal financial statements. Prior to 2009, municipal financial statements did not include any information relating to the nature and age of a municipality's assets. Historical cost, accumulated depreciation, and remaining useful life data on infrastructure assets are valuable when forecasting the maintenance and the replacement of a municipality's infrastructure assets. The Province also amended the 2009 Financial Information Return (FIR) to

include TCA. The benefit of imposing TCA for financial statements and the FIR is that the data is standardized across municipalities and available for analytical and planning purposes.

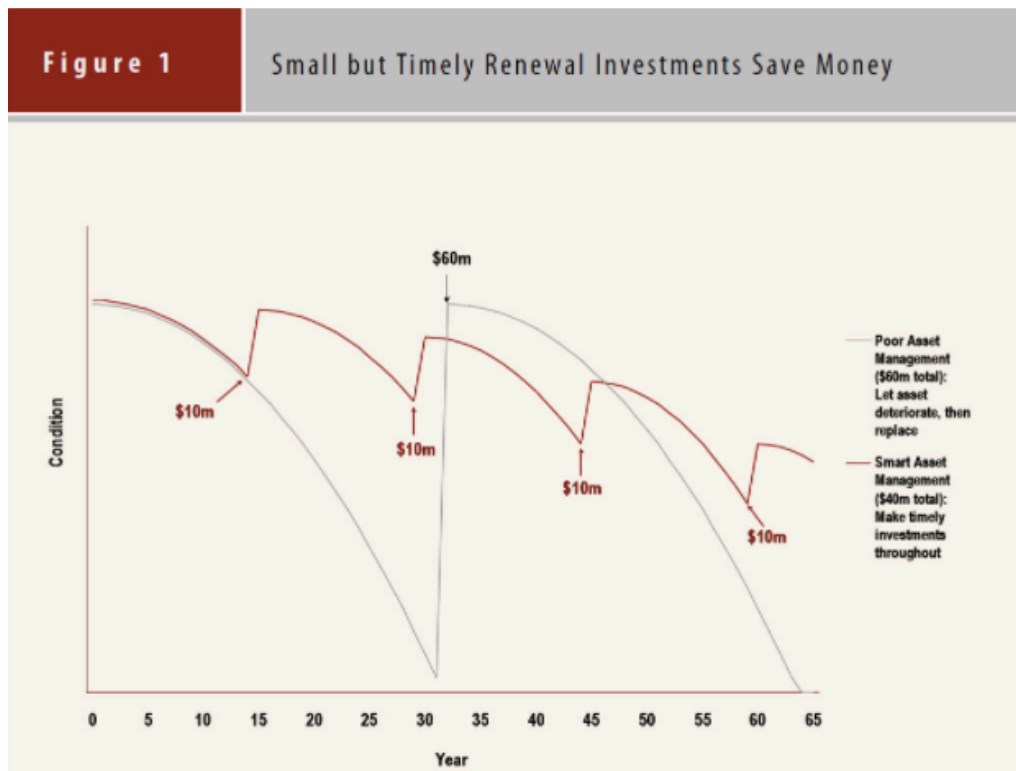
Long-Range Capital Plans

Capital planning is part of most municipalities' long-range strategic plans. Prior to TCA, the municipal operating and capital budget processes were typically on an annual cycle. However, with a greater emphasis on TCA, most municipalities have transitioned to at least a 3-year capital budget and many have moved to a 5 or 10-year cycle. The capital budget process is an excellent planning tool. Staff prepares and Council approves the capital budget based on the community's needs. There are two issues with capital plans across the province: 1) capital budgets are prepared in-house and therefore the format is not standardized which limits its analytical use, and 2) Council's requests for capital projects may be politically motivated and may not take into consideration value for money.

Asset Management Plans

Asset management planning is the process of making optimal decisions relating to the building and operating, maintaining and disposing of infrastructure assets. The objective of an Asset Management Plan (AMP) is to maximize the benefits of a municipality's assets, manage the risk, and provide satisfactory service levels to the public in a sustainable manner. Using the information from an AMP, council and staff can determine asset deficiencies, assess remaining useful life, and plan for future maintenance. Ideally AMPs help identify the optimal time in an

asset's useful life to make repairs in order to avoid a total "rip and replace" of the asset. Figure 1 below (Ontario, 2016) demonstrates the savings that can be achieved from proper asset management planning by identifying deterioration of assets early and by taking action to rehabilitate the asset throughout its useful life cycle.



Municipalities were required to have AMPs prepared and approved by councils by December 2013 for core infrastructure assets such as roads, bridges, water, and wastewater assets. Many municipalities hurried to comply because AMPs were required to meet eligibility requirements for grants. This produced AMPs that were ineffective for successful planning. Also, because various consultants from across the province created many municipalities' AMPs, the non-standardized formats limited analytical use at the Provincial level.

Long-term capital budgets, TCA, and AMPs are helpful tools to mitigate municipal infrastructure deficits and focus capital spending on the most critical assets. These tools could become more beneficial through standardization. Once in a standardized format, capital budgets and AMPs could be used to determine municipalities with critical infrastructure needs across the Province in a consistent and defensible methodical manner.

Next, the paper will provide an overview on the newly implemented Ontario Community Infrastructure Fund.

Ontario Community Infrastructure Fund

In 2014, the Province introduced the Ontario Community Infrastructure Fund (OCIF) as a permanent program to fund critical infrastructure projects for core assets - roads, bridges, water and wastewater. Small Ontario municipalities with populations under 100,000 and municipalities north of the Districts of Parry Sound and Nipissing qualify for the formula-based component and can also apply for the application-based component. Local Service Boards, agencies contracted by the Province to provide municipal services in a community but are not part of an incorporated municipality, also qualify for OCIF.

OCIF, as previously mentioned, has a formula-based component. The total formula-based funding envelope for 2017 is approximately \$95 million and the minimum annual funding per eligible municipality is \$50,000, which represents a \$25,000 increase over the initial program minimum. The formula-based component is calculated using the following four steps:

Step 1: Determine the amount of core infrastructure owned by the municipality from the Financial Information Return. The best of the 2014 or 2015 FIR data is used – whichever yields a higher value for the municipality,

Step 2: Calculate the infrastructure index by comparing a municipality's core infrastructure to its weighted property assessment and median household income,

Step 3: Determine the funding per \$100,000 of core infrastructure by evaluating a municipality's infrastructure index and how it relates to the median infrastructure index of all eligible municipalities, and

Step 4: Calculate the grant using the infrastructure index or \$50,000 whichever is greater (Province of Ontario, 2017).

Weighted property assessment is taxable assessment multiplied by the appropriate tax ratios. Tax ratios distribute the tax burden between property tax classes relative to the residential tax ratio, which is “one”. The tax ratio for a commercial property is set higher than a residential property as the assumption is that a commercial property consumes municipal services at a higher ratio than a residential property.

OCIF also has an Application-based Component. Approximately \$100 million will be allocated through the application-based component for the fiscal year 2017-18 intake top-up. Application-based eligibility is restricted to core infrastructure projects that are part of a municipality’s AMP, capital construction for new core infrastructure that will address health and safety concerns, and capital maintenance for the rehabilitation or replacement of core infrastructure. Municipalities must prepare and submit applications to the Province annually in late spring. The Province will review and evaluate each project on its merits and then award funding to the successful applicants.

The benefit of the new OCIF is that it provides steady, long-term funding for small, rural, and northern communities to build and maintain capital assets by providing targeted funding for critical core infrastructure projects. Another benefit of OCIF is its transparency. The Province posts the amount of the municipal formula-based grant as well as the successful application-based project descriptions and grant amounts. A major disadvantage of OCIF is the application process. OCIF has two granting components: 1) a formula-based component, and 2) an application-

based component. The latter requires a written application, municipal competition, provincial scrutiny, and grant reporting.

As a result of the OCIF application-based process, grant writing firms have sprung up offering assistance to draft grant applications. The fees can be excessive for small municipalities, between 25% and 40% of the total grant if the application is successful. OCIF grants are non-matching. A matching grant requires a municipality to provide a portion of its own source revenues to qualify for funding. The use of a grant-writing firm transforms a non-matching grant to a matching grant because the fees must be raised through own source revenues, placing a strain on remaining municipal programs and services.

There is limited information regarding OCIF application-based grant allocations, for example how many applications are submitted and for what projects, or what criteria, other than health and safety concerns, is used to select municipalities that are worthy of funds. Councils want to know why their application was not successful and why their municipality did not receive funding.

This paper aims to determine if the province has enough data available, financial and statistical, to effectively allocate funds based on infrastructure need. Data from the Provincial Financial Information Returns (Ministry of Municipal Affairs, 2015) and geographical coordinates (Wikipedia) were used to assess the Province's ability to allocate funds for infrastructure. Further details on the data analysis to assess the Province's ability to allocate funds based on need, will be discussed in the appropriate sections of this paper.

This research paper is concerned with municipal infrastructure deficits, the burden of provincial reporting for municipalities, and how funds from senior levels of government can be allocated efficiently and effectively to municipalities with infrastructure needs.

This paper argues that the application-based component of the OCIF grant exacerbates the burden of municipal reporting to the Province, reduces transparency, and impairs consistency at the Provincial level. This paper aims to determine if the Province has enough data available, financial and statistical, to effectively allocate funds to the local level based on infrastructure need. Information from the Provincial Financial Information Returns (Ministry of Municipal Affairs, 2015) and geographical coordinates (Wikipedia) were used to assess the Province's ability to allocate funds for infrastructure. Details on the data analysis to assess the province's ability to allocate funds based on need, will be discussed in the next sections of this paper.

Methodology

The following section provides the framework used to answer the research question:

Does the Province have enough financial and statistical data available to execute a needs-based grant allocation to target municipal infrastructure investment instead of utilizing an application process to allocate funds?

The Financial Information Return (FIR) is the main data collection tool used by the Ministry of Municipal Affairs to collect annual financial and statistical information from municipalities across the Province of Ontario. The FIR is a standardized document with multiple schedules. The Ministry updates the FIR annually to comply with new legislation and PSAB reporting requirements. For example, the 2009 FIR was updated to include tangible capital asset information. To assist municipalities with the accurate completion of the FIR it was designed to include automatic calculations, verification checks, carry forward data, and opening balances. All municipalities must submit an FIR balanced to the audited financial statements on or before May 31 for the previous December 31 year-end. Failure to submit an FIR to the Province may impact future grant funding opportunities.

Research Design

The data points contained in the 2015 FIR were downloaded from the Ministry of Municipal Affairs – Financial Information Return website (Province of Ontario) for all municipalities. The data was then matched with the OCIF Intake 1,

Intake2, Intake 3 (application-based component) as well as the OCIF formula-based component amounts for the year 2015. Local Service Boards receiving grant funding were excluded from any analysis contained in this paper. Longitude and latitude coordinates were also provided for each municipality since one of the criteria of eligibility for OCIF is that the municipality must be north of the Districts of Parry Sound and Nipissing. Any municipality that did not receive formula-based or application-based OCIF was ignored in the data sets.

The Province utilized either the 2014 or 2015 FIR when calculating the formula-based component of the OCIF grant. Therefore 2015 FIR data was selected for use in this research design. In an effort to explain the OCIF Intake (application-based component of the grant) the coefficient of determination or R-squared (R^2) value was used to derive the correlations between the dependent variables (OCIF grant amounts) and the independent variables (2015 FIR data points). “R-squared is a statistical measure of how close data are fitted to a regression line” (Frost, 2013).

The following permutations of data were computed:

- 1) OCIF Intake 1 and 2015 data points
- 2) OCIF Intake 2 and 2015 data points
- 3) OCIF Intake 3 and 2015 data points
- 4) Total OCIF Intake and 2015 data points
- 5) Total Intake plus 2015 formula-based component and 2015 data points,
and
- 6) 2015 formula-based component and 2015 data points.

The results of the computation are provided in Table 1.

Table 1 – Results of R² Calculation	OCIF Intake One	OCIF Intake Two	OCIF Intake Three	Total OCIF Intake	Total Intake plus 2015 Formula	2015 Formula
Average R Squared	0.0070180287	0.0112201046	0.0043468216	0.0064694769	0.0170352799	0.2257165912
Minimum R Squared	0.0000000315	0.0000001100	0.0000000289	0.0000001361	0.0000001568	0.0000005115
Maximum R Squared	0.1004097829	0.0961602613	0.0315362923	0.0918668803	0.1048305676	0.9197047292
Standard Deviation	0.0113361059	0.0148745161	0.0042322892	0.0103195552	0.0204097149	0.2656483104

Since the R^2 values and standard deviation are low for scenarios 1 through 5 there is minimal correlation between the dependent and independent variables. Therefore a statistical model using regression analysis to estimate the relationship between the OCIF application-based grant and 2015 FIR data points and to predict future grant amounts was not predictive. Appendix A contains the full computation for all data points. To test the concept, the 2015 formula-based grant was also run through the same computation. Scenario 6 produced significant R^2 values and standard deviation, which was to be expected since the Province uses similar data to calculate the formula-based OCIF grant amounts. Since this methodology was not effective to predict the OCIF application-based grants using regression analysis, further analysis was performed using the FIR's key performance indicators for all municipalities for the years 2011 through to 2015.

Analysis of Key Performance Indicators

Key performance indicators (KPI) measure how well an organization is achieving critical organizational objectives. The Ministry has developed six KPIs to assess the financial health of municipalities:

- 1) Operating Surplus Ratio: The Operating Surplus Ratio, expressed as a percentage, is an indicator of the extent to which revenues raised cover operational expenses only or are available for capital infrastructure. A negative ratio indicates the percentage increase required to achieve break even. Operating Surplus is calculated by dividing a municipality's net operating surplus by its total rates (property taxes, user fees, and service charges) revenue. The target ratio for a municipality is between 1% and 15%. A ratio over 15% is considered advanced by the Ministry.
- 2) Current Ratio: The Current Ratio is a measure of a municipality's ability to pay short-term obligations. Current Ratio is calculated by dividing current assets by current liabilities. The target is greater than 1:1 ratio.
- 3) Rates Coverage Ratio: The Rates Coverage Ratio is a measure of the municipality's ability to cover its expenditures through its own revenue. Rates Coverage Ratio is calculated by dividing the total rates revenue by the total operating expense. The basic target is 40 to 60%, intermediate is 60 to 90%, and the advanced target is greater than 90%.
- 4) Debt Service Coverage Ratio: The Debt Service Coverage Ratio is a measure of a municipality's ability to service its debt payments. To calculate a municipality's Debt Service Coverage Ratio, the operating surplus before interest and amortization is divided by the sum of principle and interest payments. The target ratio is 2.
- 5) Asset Sustainability Ratio: The Asset Sustainability Ratio is an approximation of the extent to which a municipality is replacing, or acquiring new assets as

existing infrastructure reaches the end of its useful life. The target is greater than 90%. A municipality with a ratio less than 90% is not sufficiently maintaining its infrastructure assets. This course of action may result in a reduced level of service and may place a greater burden on future ratepayers. The Asset Sustainability Ratio is calculated by dividing asset additions by annual amortization expense.

- 6) Asset Consumption Ratio: The Asset Consumption Ratio estimates the age of a municipality's physical assets. It measures the extent to which depreciable assets have been consumed by comparing the total depreciation of assets against the historical cost. A target less than 25% signifies new infrastructure, 26% to 50% signifies moderately new infrastructure, 51% to 75% signifies moderately old infrastructure, and over 75% signifies old infrastructure. The Asset Consumption Ratio is calculated by dividing the closing amortization balance by the closing historical cost balance.

KPIs were downloaded from the FIR website for all municipalities for the years 2011 through to 2015. At the time of the download, 2016 FIR was not available. Data from 2011 to 2014 was used to identify KPI trends prior to OCIF grants. KPI data from 2015 may identify improvements related to 2015 formula and Intake 1 grants. The municipalities were organized into three groups:

- 1) Group 1 – Municipalities (27) that were not eligible for OCIF and did not receive any application or formula-based funding,
- 2) Group 2 – Municipalities (268) that received only the annual formula-based OCIF grant, and

3) Group 3 – Municipalities (147) that received both application and formula-based OCIF grant.

An average was calculated by year, for each group, and for each KPI measure. For some KPIs where the measure was zero, for example Debt Service Coverage Ratio, “N/A” replaced the zero as to not skew the average calculation. Group averages for each KPI were placed in a table and then plotted on a line chart. The next section of this report will provide the results and an interpretation of the data. Appendix B contains Group 1 data, Appendix C contains Group 2 data, and Appendix C contains Group 3 data.

Results and Interpretation of Data

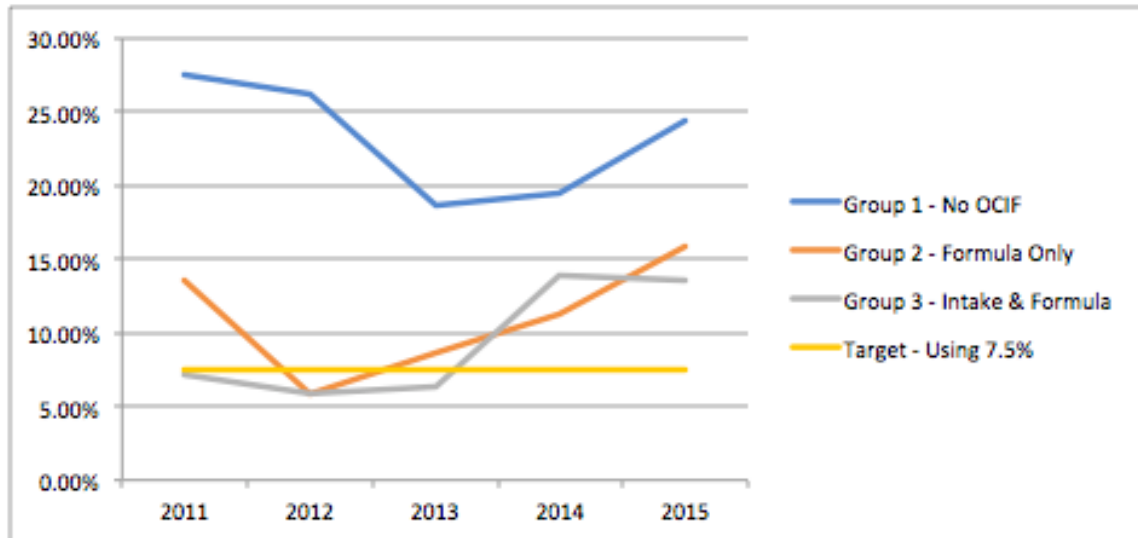
This section provides the results of the KPI analysis. It includes an interpretation of the results for the time frame leading up to OCIF and evaluates the impact of the first formula and the effectiveness of application-based grants. It also provides a selection of specific municipalities, both recipients and non-recipients of Intake funds, detailing the impact of OCIF grants on its KPIs.

Operating Surplus Ratio:

Operating Surplus Ratio is an indicator of the extent to which revenues raised cover operational expenses only or are available for capital infrastructure. Average Operating Surplus Ratios were calculated and graphed in Table 2. For ease of representation, the target mid-point (7.5%) was used.

Table 2 demonstrates that on average Group 1 has the ability to raise revenues to support its operating and infrastructure requirements through its rates revenue as well as the current levels of senior government assistance. This group is also trending in an upward direction from the target suggesting that operating surpluses are increasing. Group 2 and Group 3 were struggling to meet operating and capital requirements prior to 2014 but are now trending away from the limit since the initiation of OCIF. This paper would argue that after analyzing the average Operating Surplus Ratios across the Province, the OCIF formula and application grants are effectively targeting municipalities with lower Operating Surplus Ratios. In municipalities, operating expenses take priority over capital projects. Lower ratios indicate a reduced ability to fund infrastructure needs.

Table 2 with Line Chart	Average Operating Surplus Ratio (Target 0% to +15%)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	27.46%	26.20%	18.62%	19.47%	24.40%
Group 2 - Formula Only	13.53%	5.81%	8.72%	11.28%	15.80%
Group 3 - Intake & Formula	7.18%	5.89%	6.37%	13.95%	13.58%
Target - Using 7.5%	7.50%	7.50%	7.50%	7.50%	7.50%

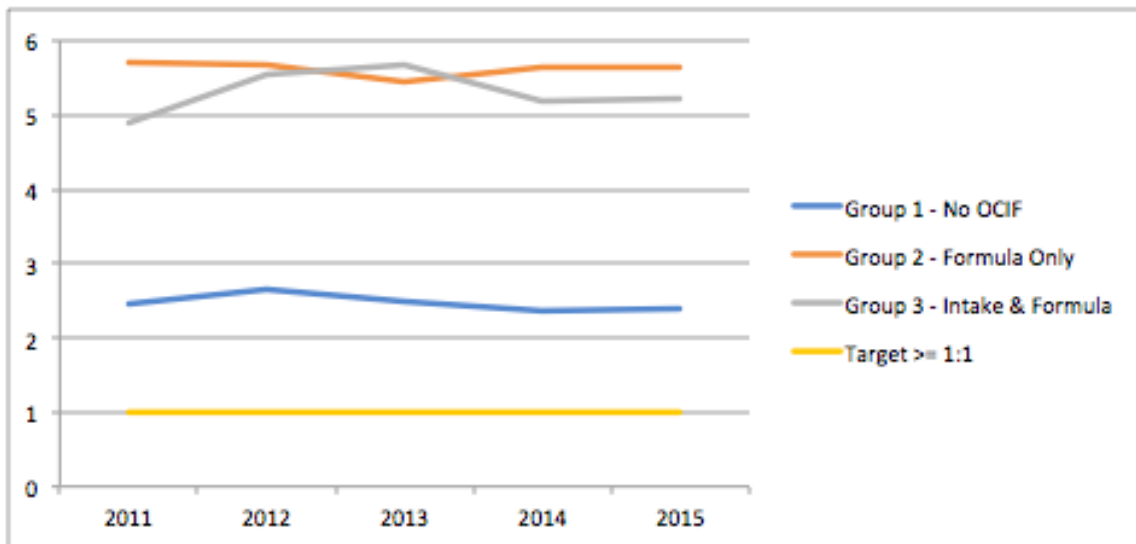


Current Ratio:

The Current Ratio is a measure of a municipality's ability to pay short-term obligations. Average Current Ratios were calculated and graphed in Table 3.

Table 3 indicates that all groups on average are maintaining a consistent level for the Current Ratio and are all exceeding the target. However, this paper argues that there is an indication that Groups 2 and 3 are retaining too much cash and not effectively utilizing liquid resources to respond to operating and capital requirements because the target for both groups is well above the target of 1:1.

Table 3 with Line Chart	Average Current Ratio (Target >= 1:1)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	2.47106986	2.66593794	2.49546937	2.36482314	2.39638412
Group 2 - Formula Only	5.71269546	5.66500296	5.44171031	5.65791576	5.65638672
Group 3 - Intake & Formula	4.89276981	5.5457417	5.68288428	5.17639675	5.22368327
Target >= 1:1	1.00	1.00	1.00	1.00	1.00

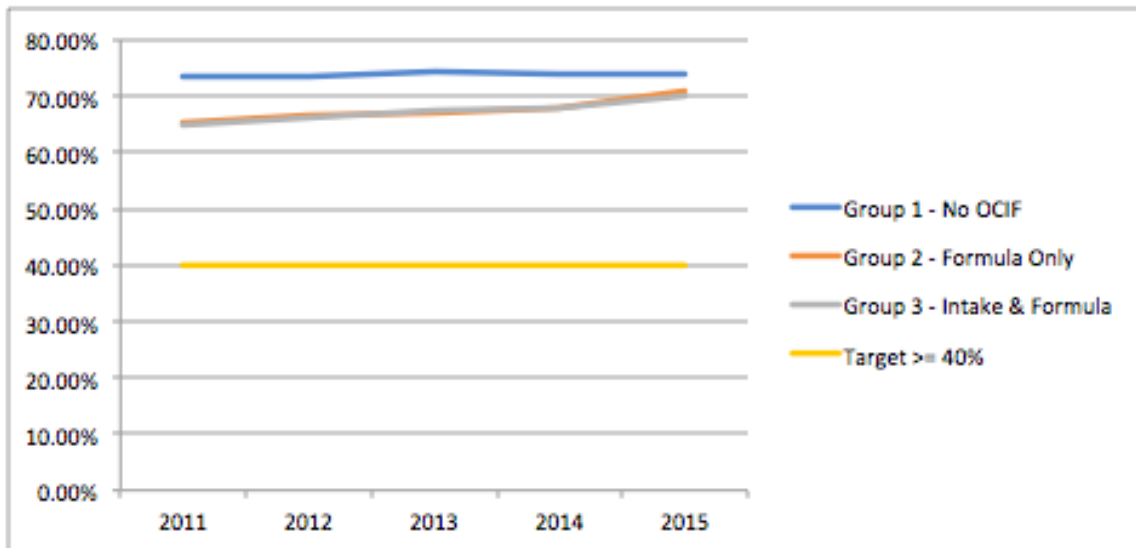


Rates Coverage Ratio:

The Rates Coverage Ratio is a measure of the municipality's ability to cover its expenditures through its own revenue. Average Rates Coverage Ratios were calculated and graphed in Table 4.

Table 4 indicates that all groups, on average, are exceeding the Rates Coverage ratio. Group 2 and Group 3 are very closely aligned with a ratio between 65% and 70%. The Group 1 ratio is approximately 74%. Although these are strong indicators for the Rates Coverage Ratio, Groups 2 and 3 are falling behind Group 1 and potentially require assistance.

Table 4 with Line Chart	Average Rates Coverage Ratio (Target >= 40%)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	73.47%	73.73%	74.33%	73.83%	73.87%
Group 2 - Formula Only	65.20%	66.77%	66.86%	68.05%	70.96%
Group 3 - Intake & Formula	64.92%	66.13%	67.42%	67.85%	70.17%
Target >= 40%	40.00%	40.00%	40.00%	40.00%	40.00%



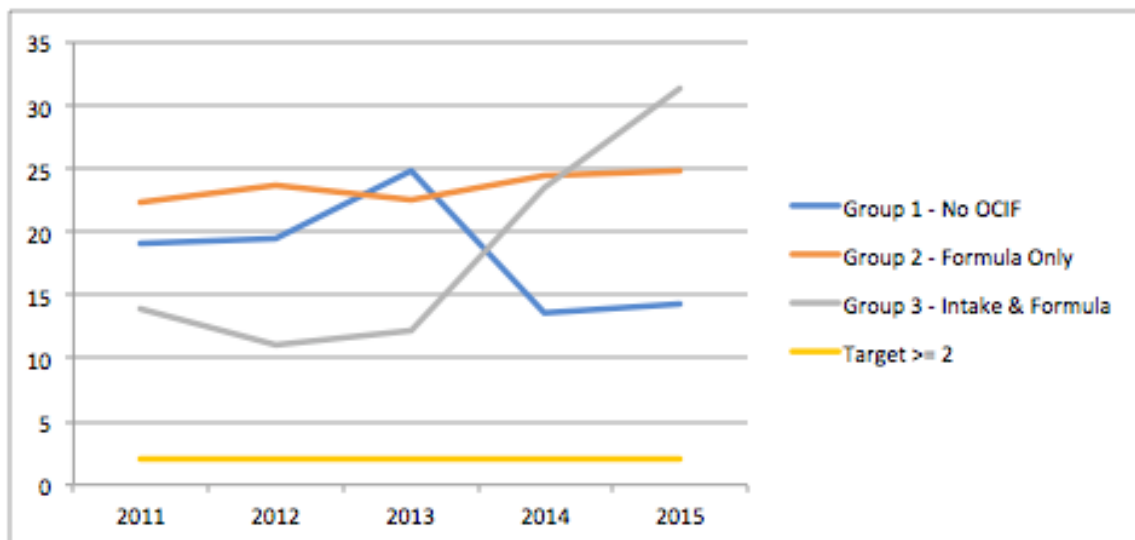
Debt Service Coverage Ratio:

The Debt Service Coverage Ratio is a measure of a municipality's ability to service its debt payments. Municipalities can only incur debt for infrastructure assets; debt cannot be incurred for operating expenses such as salaries and benefits. Average Debt Service Coverage Ratios were calculated and graphed in Table 5.

Table 5 indicates that on average all groups are maintaining a healthy Debt Service Coverage Ratio. Group 2's trend is level, which would indicate that as old debt is retired, new debt is acquired. This practice allows a municipality to maintain and renew infrastructure assets with minimal impact on the municipal levy. The chart indicates that Group 1 had a significant increase to debt levels between 2013 and 2014. This would indicate that Group 1 has taken an aggressive stance toward

infrastructure renewal. However Group 3 has been trending upwards from the target since 2013, which would indicate that this Group is not incurring any new debt for infrastructure needs. This indicates that this group may be in receipt of funds that could be distributed to other groups in need.

Table 5 with Line Chart	Average Debt Service Coverage Ratio (Target ≥ 2)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	19.1000243	19.5060835	24.9148724	13.5998643	14.224126
Group 2 - Formula Only	22.3477907	23.7784167	22.4975512	24.4559495	24.7632899
Group 3 - Intake & Formula	13.8381675	11.0667372	12.1089124	23.5155246	31.3110266
Target ≥ 2	2.00	2.00	2.00	2.00	2.00



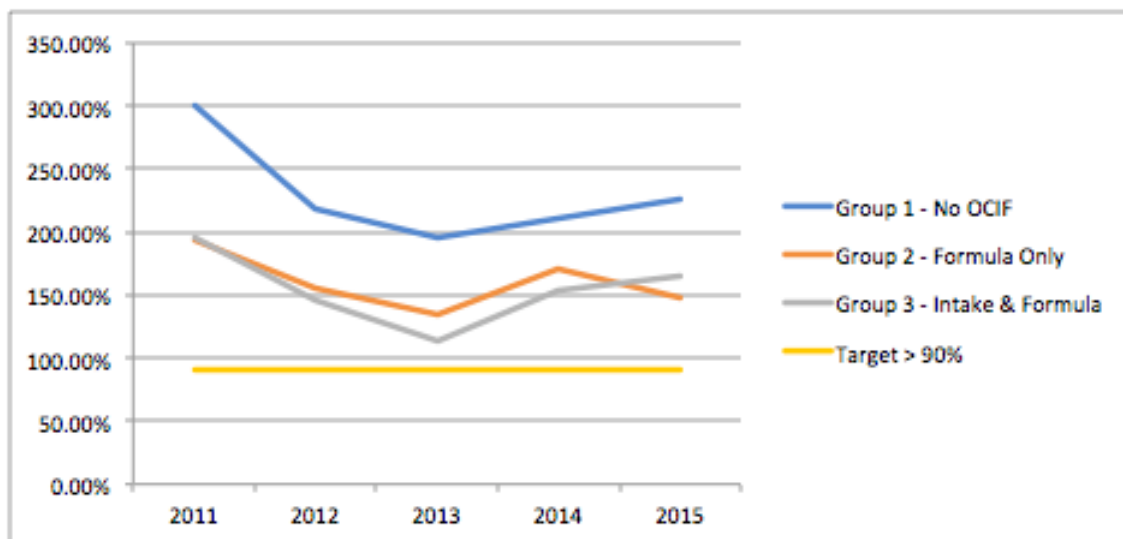
Asset Sustainability Ratio:

The Asset Sustainability Ratio is an approximation of the extent to which a municipality is replacing, or acquiring new assets as existing infrastructure reaches the end of its useful life. Average Asset Sustainability Ratios were calculated and graphed in Table 6.

Table 6 indicates that, on average, municipalities are replacing and acquiring new assets regularly. Group 1's ratio trended toward the target prior to 2013 but

from 2014 onward it is trending away from the target indicating that Group 1 is replacing and acquiring assets. Group 2 and Group 3 has followed a similar pattern as Group 1. However Group 2's Asset Sustainability Ratio is trending toward the target while Group 3's ratio is trending away from the target. This indicates that municipalities in Group 3 are replacing or acquiring assets more effectively than municipalities in Group 2. This paper would argue that after assessing the average Asset Sustainability KPI of municipalities across the Province, the OCIF formula and application-based grants are effectively targeting municipalities (Groups 2 and 3) with infrastructure needs when compared to KPI of Group 1.

Table 6 with Line Chart	Average Asset Sustainability Ratio (Target > 90%)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	300.31%	218.48%	195.62%	210.00%	226.35%
Group 2 - Formula Only	193.50%	155.07%	134.11%	170.19%	147.12%
Group 3 - Intake & Formula	194.88%	145.83%	113.22%	153.29%	164.26%
Target > 90%	90.00%	90.00%	90.00%	90.00%	90.00%



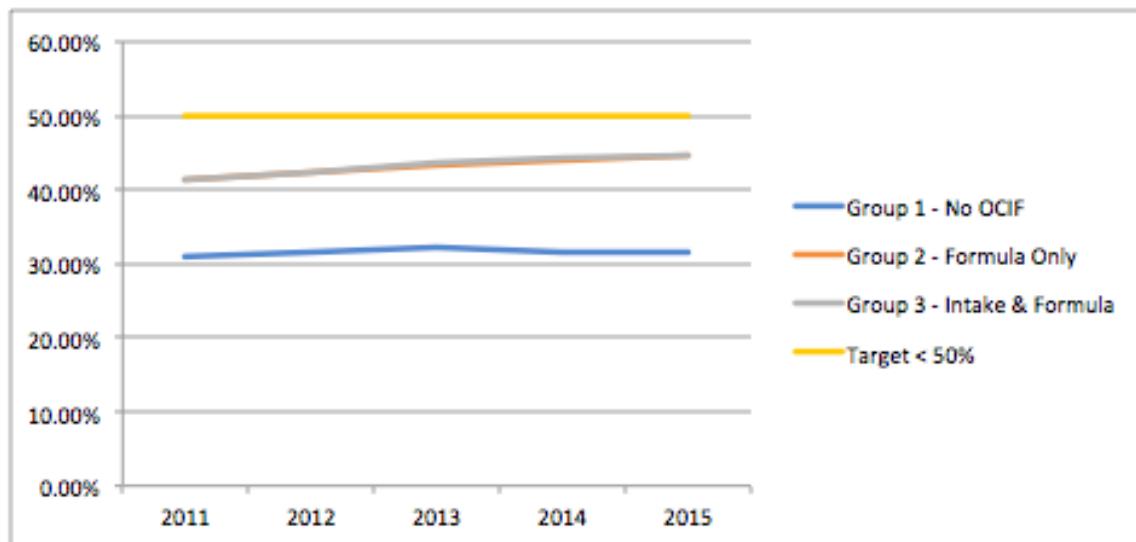
Asset Consumption Ratio:

The Asset Consumption Ratio estimates the age of a municipality's physical assets.

Average Asset Consumption Ratios were calculated and graphed in Table 7.

The Ministry's target for Asset Consumption is less than 50% and all three groups are well within the limit. However, on average, Group 1 is performing approximately 14% better and the ratio is stable where Group 2 and 3 are closely aligned and trending toward the limit. This paper would argue that after analyzing the average Asset Consumption KPI across the Province, the OCIF formula and application-based grants are effectively targeting municipalities (Groups 2 and 3) with infrastructure needs but the impact of the grant is not yet reflected in Asset Consumption Ratio on average.

Table 7 with Line Chart	Average Asset Consumption (Target < 50%)				
	2011	2012	2013	2014	2015
Group 1 - No OCIF	30.98%	31.45%	32.12%	31.45%	31.45%
Group 2 - Formula Only	41.29%	42.34%	43.40%	44.04%	44.80%
Group 3 - Intake & Formula	41.24%	42.26%	43.51%	44.24%	44.65%
Target < 50%	50.00%	50.00%	50.00%	50.00%	50.00%



Group Case Analysis

In this section of the paper, the KPIs of selected individual municipalities will be studied on a case-by-case basis. For each municipality there will be an interpretation of the KPIs for the time frame leading up to OCIF and an assessment of the impact of the first formula and the effectiveness of application-based grants on its KPIs. Municipal KPIs that do not meet targets will be highlighted, in red, in the tables below.

Group 1 Cases

Municipalities in Group 1 are ineligible for OCIF because populations exceed 100,000. For Group 1, with the exception of Current Ratios for Region of Durham, Region of Halton, and City of Toronto (see Appendix B) all are performing well according to the KPI measurement criteria. Most of the municipalities in Group 1 are classified as advanced with respect to Operating Surplus Ratio indicating that these municipalities have more than adequate resources to cover operational expenses and fund capital infrastructure projects. The Province has made a fair assessment by not providing any OCIF for Group 1 municipalities as the KPIs indicate there is enough capacity to meet infrastructure needs without OCIF funding.

Group 2 Cases

Municipalities in Group 2 are eligible for OCIF but have only received the formula-based component. There is no data available to determine if these municipalities applied for and were refused application-based funding. County of

Oxford and Township of Wellesley were selected for further analysis. Both Oxford and Wellesley are in Group 2 but the KPIs for each are vastly different.

County of Oxford

For the years 2015 to 2019, the County of Oxford will receive \$5,545,693 (2015 - \$530,194; 2016 - \$530,194; 2017 - \$966,411; 2018 - \$1,373,162; and 2019 - \$2,145,702) in formula-based OCIF funding. Prior to OCIF funding, all of Oxford's KPIs met or exceeded the KPI targets. Oxford's Asset Sustainment Ratio is well above the Ministry's target of 90%. The Asset Consumption Ratio indicates that Oxford has relatively new infrastructure.

Table 8 - COUNTY OF OXFORD	2011	2012	2013	2014	2015
Operating Surplus Ratio (Target 0% to +15%)	22.64%	26.50%	27.05%	31.68%	25.18%
Current Ratio (Target >= 1:1)	4.45	6.30	6.45	7.30	7.28
Rates Coverage Ratio (Target >= 40%)	71.96%	81.09%	76.16%	73.89%	74.35%
Debt Service Coverage Ratio (Target >= 2)	4.61	5.84	5.62	6.06	5.35
Asset Sustainability Ratio (Target >90%)	352.08%	125.23%	214.35%	156.63%	207.05%
Asset Consumption (Target < 50%)	32.78%	34.12%	34.17%	34.97%	35.30%

Township of Wellesley

For the years 2015 to 2019, the Township of Wellesley will receive \$1,391,468 (2015 - \$141,423; 2016 - \$141,423; 2017 - \$242,708; 2018 - \$343,279; and 2019 - \$522,635) in formula-based OCIF funding. Many of Wellesley's KPIs indicate a municipality that is struggling to meet its obligations. Revenue raised does not adequately cover operating expenses nor would it adequately fund capital investments. Wellesley's Asset Sustainability Ratio is moving slowly in a positive direction toward the target and the Asset Consumption Ratio indicates that

infrastructure is moderately old. However, the Debt Service Coverage ratio supports that Wellesley can issue debt to fund infrastructure requirements.

Table 9 - TOWNSHIP OF WELLESLEY	2011	2012	2013	2014	2015
Operating Surplus Ratio (Target 0% to +15%)	-61.84%	-71.08%	-60.25%	-65.89%	-49.96%
Current Ratio (Target >= 1:1)	3.31	3.37	2.87	2.06	2.89
Rates Coverage Ratio (Target >= 40%)	46.11%	45.25%	45.99%	47.90%	49.61%
Debt Service Coverage Ratio (Target >= 2)	12.27	8.37	9.86	8.03	11.68
Asset Sustainability Ratio (Target >90%)	27.16%	26.56%	24.74%	38.81%	42.13%
Asset Consumption (Target < 50%)	56.49%	59.42%	62.09%	64.64%	67.09%

Given that Group 2 municipalities received the formula-based component of OCIF and since the cases of Oxford and Wellesley contain very different KPI results, this may indicate that the process is not benefiting all municipalities equally.

Group 3 Cases

Municipalities in Group 3 qualify for OCIF and have received the formula-based component as well as at least one Intake grant. Township of Plummer Additional, Municipality of Highlands East, and City of Peterborough were selected for further analysis. Again, Plummer Additional, Highland East, and Peterborough are in Group 3 but the KPIs for each are vastly different.

Township of Plummer Additional

For the years 2015 to 2019, the Township of Plummer Additional will receive \$200,000 (2015 - \$25,000; 2016 - \$25,000; 2017 - \$50,000; 2018 - \$50,000; and 2019 - \$50,000) in formula-based OCIF funding. Plummer Additional received a total of \$693,000 in application-based funding (Intake 1 - \$ 346,500, and Intake 3 -

\$346,500). Although the Operating Surplus Ratio and Asset Sustainability Ratios indicate improvement in 2015, many of Plummer Additional's KPIs from 2011 to 2014 indicate a municipality that is challenged to meet its commitments. The Asset Consumption Ratio for Plummer Additional's suggests that its infrastructure is moderately old and the Debt Service Ratio indicates that Plummer Additional has no debt. Plummer Additional could incur debt to alleviate some infrastructure issues.

Table 10 - TOWNSHIP OF PLUMMER ADDITIONAL	2011	2012	2013	2014	2015
Operating Surplus Ratio (Target 0% to +15%)	-24.28%	-3.96%	-9.67%	-5.10%	11.42%
Current Ratio (Target >= 1:1)	7.92	8.95	10.72	14.92	11.29
Rates Coverage Ratio (Target >= 40%)	51.43%	60.32%	57.93%	58.85%	57.92%
Debt Service Coverage Ratio (Target >= 2)	N/A	N/A	N/A	N/A	N/A
Asset Sustainability Ratio (Target >90%)	86.08%	47.69%	83.27%	38.21%	127.85%
Asset Consumption (Target < 50%)	64.73%	67.18%	67.86%	70.45%	70.75%

Municipality of Highland East

For the years 2015 to 2019, the Municipality of Highland East will receive \$200,000 (2015 - \$25,000; 2016 - \$25,000; 2017 - \$50,000; 2018 - \$50,000; and 2019 - \$50,000) in formula-based OCIF funding. Highland East received a total of \$851,534 in application-based funding (Intake 1 - \$ 283,589 and Intake 2 - \$567,945). KPIs indicate that Highland East is financially healthy and has not issued any debt.

Table 11 - MUNICIPALITY OF HIGHLANDS EAST	2011	2012	2013	2014	2015
Operating Surplus Ratio (Target 0% to +15%)	-1.39%	0.07%	5.58%	12.60%	13.46%
Current Ratio (Target >= 1:1)	4.00	4.09	4.05	5.04	5.53
Rates Coverage Ratio (Target >= 40%)	72.71%	76.30%	73.41%	79.17%	76.99%
Debt Service Coverage Ratio (Target >= 2)	N/A	N/A	N/A	N/A	N/A
Asset Sustainability Ratio (Target >90%)	126.35%	110.13%	159.23%	170.70%	134.24%
Asset Consumption (Target < 50%)	41.35%	42.93%	44.29%	43.92%	44.87%

City of Peterborough

For the years 2015 to 2019, the City of Peterborough will receive \$5,287,009 (2015 - \$457,719; 2016 - \$457,719; 2017 - \$934,977; 2018 - \$1,331,308; and 2019 - \$2,105,286) in formula-based OCIF funding. Peterborough received a total of \$3,597,500 in application-based funding (Intake 1 - \$ 1,597,500 and Intake 2 - \$2,000,000). Prior to OCIF, all of Peterborough's KPIs indicate a municipality that has more than adequate resources to fund operating and capital projects. The Asset Consumption Ratio indicates that Peterborough's infrastructure is relatively new.

Table 12 - CITY OF PETERBOROUGH	2011	2012	2013	2014	2015
Operating Surplus Ratio (Target 0% to +15%)	17.15%	16.29%	14.87%	11.95%	12.05%
Current Ratio (Target >= 1:1)	3.75	4.04	2.99	2.49	2.20
Rates Coverage Ratio (Target >= 40%)	64.64%	66.64%	65.40%	66.80%	64.43%
Debt Service Coverage Ratio (Target >= 2)	4.33	4.86	4.28	4.11	3.91
Asset Sustainability Ratio (Target >90%)	323.85%	248.97%	213.11%	200.24%	174.70%
Asset Consumption (Target < 50%)	39.42%	38.04%	38.61%	38.69%	39.47%

At the macro level, when KPIs are averaged to assess the effectiveness and impact of OCIF on municipal KPIs it appears that the Province has apportioned the

grant effectively to municipalities with infrastructure needs with the exception of Debt Service Coverage Ratio for Group 3. It appears that this group received substantial application-based funding when some of its infrastructure requirements could have been funded by debt. However, at the micro level when assessing individual municipalities, the OCIF is penalizing municipalities such as Wellesley, and Plummer Additional and over compensating municipalities such as Oxford, Peterborough, and Highland East. The human element of grant application review, ranking and selection has favoured some municipalities more than others.

Application Effectiveness

After an analysis of municipal KPIs, it appears that the human element of review, ranking, and selection of grant applications has produced a less than equitable re-distribution of revenues from the Province to local governments. For the application-based component of OCIF to be effective, the funding should have benefited municipalities with poor KPIs with the goal that all municipalities have similar KPIs. For example, municipalities with low KPIs would receive greater amounts of funding until KPIs improve and municipalities with high KPIs would receive low amounts of funding until KPIs start to deteriorate. Peterborough is an example of a municipality with high KPIs yet it received almost \$9 million in OCIF. Was the Peterborough case an exercise in “value for money” for the Province? Was there something else, beyond financial, happening with the City of Peterborough? With these atypical cases identified, why would the Province not want to move to a strictly formula-based, with conditions, grant model such as Canada Gas Tax for OCIF?

A formula-based grant allocation model would produce a defensible and transparent allocation model. Councils want to know why their municipality did not receive funds. A formula-based allocation would also ensure non-partisan grant awards.

A second benefit to a formula-based grant system is reduced provincial reporting. Provincial reporting is considered a drain on municipal resources. Municipalities need to focus on modernization, effective delivery of services, and infrastructure improvement (Lobo, 2017). Many application-based grants require formal expressions of interest, complex applications, municipal competition for funds, senior government review and ranking, grant financial audits, and final project reporting. Formula-based grants, with conditions and reduced reporting, allow municipalities to focus on what is important to communities.

A third benefit is predictable and stable funding. “Lack of predictable funding makes it difficult for municipalities to plan expenditures. Capital grants, in particular, need to be maintained for sufficiently long periods of time to allow municipalities to sustain capital investments” (Slack E. , Provincial-Local Fiscal Transfers in Canada, 2009, p. 28). For municipalities, the size of the grant is important but for planning purposes, predictable and stable funding is essential.

A less obvious but important benefit is the reduction in need for professional grant writers. Employees working for small municipalities must wear many “hats” and the current skill set may not include grant writing. The upsurge of grant-writing firms has placed small municipalities between a “rock and a hard place”. If the municipality applies for the grant on its own, there is a danger it won’t be successful.

If the municipality uses a grant-writing firm, there is a danger that it will be successful and have to pay the hefty fee. Grants should be awarded based on financial merit and need.

A formula-based grant provides local fiscal autonomy. The flexibility of formula-based grants such as Canada Gas Tax allows for local fiscal autonomy. Under Canada Gas Tax, municipalities can spend the grant as it chooses as long as it is spent on infrastructure improvements (AMO, 2017). Councils and management are closer to needs of the community and residents providing a major benefit.

And lastly, formula-based grants eliminate the potential of municipal gaming – purposely ignoring the maintenance of an asset with the hope that the Province will step in with funding.

Although there are strong benefits of formula-based grant systems there are also strong arguments for application-based funding. Canada as a country is too large and diverse to effectively allocate funds through an application process. Due to the vast diversity of the country, the Federal government chose an easy method to allocate Canada Gas Tax funds, which is also easy to understand. The Province has a better understanding of the unique infrastructure pressures of local government making the application process effective.

There may be political reasons for an application-based system. The Province may want to keep the application process in place due to the potential for grant awards to buy votes from opposition-held ridings.

Councils have an interest in re-election. The drive to remain on Council may create an environment of poor decision-making. Spending must take into

consideration value for money to ensure effective use of resources. Municipalities are creatures of the Province and the Province needs to maintain control over funds.

If AMPs were standardized the Province could utilize the data to effectively target municipalities that are in need of infrastructure assistance. With standardized AMPs, similar to the FIR, the Province would have an effective tool to:

- 1) Target municipalities with infrastructure needs,
- 2) Measure the performance of recipients, and
- 3) Hold municipalities and Councils responsible for capital spending and infrastructure deficits.

Conclusion

Small and rural municipalities are facing infrastructure deficits due to the inability to raise sufficient funds through property taxes. Federal and Provincial governments collect 92 cents of every tax dollar and must step in to re-distribute revenues to local governments for infrastructure needs.

The goal of this research was to determine if the Province has enough financial and statistical data available to execute a needs-based grant allocation to target municipalities with infrastructure needs instead of an application process. Currently, the Province has data from the FIR, which contains a wealth of information that could be used to assess the financial health of each municipality. The data from the 2015 FIR was not sufficient to provide a new model to allocate both the formula and application components of OCIF.

A secondary goal of this paper was to investigate the effectiveness of the OCIF formula and application-based grant. The Province does use data to allocate a portion of OCIF through the formula-based component and uses an application process to allocate the balance. However, upon review of the financial KPIs of municipalities, there is an indication that the OCIF process is not benefiting all municipalities equally and leaving some municipalities behind.

While no revenue re-distribution method is perfect, the Province can do a better job allocating funds to municipalities with real infrastructure needs with better data. A standardized AMP would give the Province the ability to target municipalities with infrastructure needs, measure performance of recipients, and

hold Councils responsible while at the same time provide municipalities and communities with much needed local autonomy.

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