# Municipal Consolidation, Regional Planning and Fiscal Accountability: The Recent Experience in Two Maritime Provinces*

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In the recent debates on municipal consolidation in Canada, the importance of regional planning has emerged as an important aspect of the discourse. The advocacy for consolidation has been particularly apparent in regions affected by rapid physical change. A number of Canadian provinces experiencing rapid population growth in suburban and rural regions -- including Ontario, Quebec, New Brunswick and Nova Scotia -- have advocated consolidation to try to address the dilemmas associated with population spillovers. Establishing new boundaries that encompass the whole area of geographic expansion and in the process establishing a single coordinating political administration, is considered beneficial for both the urbanised municipality and the neighbouring jurisdiction where the population overflow is occurring. The single government is expected to provide much more effective regional planning, allowing the municipality increased capability to deal with issues associated with environmental protection, infrastructure investment and waste management.

One particularly important area of concern within the context of regional planning is fiscal accountability. Several provinces have expressed concern over residential and business investors locating just beyond urbanised boundaries, making extensive use of more expensive customised services in the urban juris-

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diction, while paying lower rural tax rates (Nova Scotia 1992; New Brunswick 1992; Quebec 1996a, 1996b, 1996c; Vojnovic 1998, 2000a). Thus, while paying only rural rates these residents are able to make use of both the services provided to them by the rural district, and many of the more expensive services available in the urban areas -- such as recreation facilities, libraries and schools with more customised educational amenities. This is the classic dilemma of externalities. It is a common concern in rapidly growing urban regions where population growth spills over beyond municipal boundaries.

Supporters of municipal consolidation argue that in instances of spillover benefits, enlarging municipal boundaries and incorporating all the relevant economic agents is an initiative that will ensure fiscal accountability (Nova Scotia 1992; New Brunswick 1992; O'Brien 1993; Quebec 1996a, 1996b, 1996c). Thus, put simply, a single government that encompasses all the beneficiaries of its services will have authority to charge everyone for the public amenities provided within its jurisdiction. However, there are potential problems of merging and harmonising tax structures when there are different service standards and levels, and therefore costs, of providing services to different municipalities. The difficulties are further exacerbated when some merging member municipalities do not have the fiscal capabilities to take on the associated increases in costs of the new service levels or standards.

As research on service delivery has shown, variations in service provision are particularly apparent between urban and rural districts -- although more subtle differences will exist between urban and suburban areas, and even urban areas that maintain different preferences for municipal service levels and standards. Some of the major cost differences between urban and rural service delivery exist because rural municipalities generally do not provide water and sewage networks, recreation facilities, libraries, fire hydrants, sidewalks, street and sidewalk snow removal, streetlights, public transit and the general administration that is required to support these municipal functions. Recent studies on per capita expenditures in different sized municipalities in Quebec and Ontario have demonstrated that per capita municipal expenditure can vary by over 300% between smaller rural municipalities and larger urbanised districts. These differences are largely caused by differences in the mix, the levels and the standards of services.[1]

If after an amalgamation, the cost variations in service provision between municipalities are not considered in the design of the new tax system, consider-

1. Jacques Desbiens' work has shown that the smallest municipalities in Quebec, with a population between 400 and 2,000 people, maintained average per capita expenditures on municipal services of approximately $500 per person, while municipalities ranging in size between 50,000 to 100,000 people maintained average per capita expenses of about $1,100. The municipal grouping with the largest urban centres, over 100,000 people, had expenditures ranging from $1,000 to $1,800 per capita (Desbiens 1996). Other research on average municipal expenditures in Ontario has produced similar results (Kushner et al 1996).

able inefficiencies and inequities could be generated -- particularly if the restructuring involves the merger of urban and rural areas. After the mergers, subgroups might end up unknowingly paying for services that they get no benefits from. In fact, differences in levels and standards of services among local area municipalities may exacerbate inequities and inefficiencies after an amalgamation, and not reduce them as advocates of amalgamation claim.

In this article, it is argued that consolidation in itself is a pre-condition, at best, for promoting fiscal accountability, and thus equity and efficiency in service provision. It is ultimately the design of tax-service packages that determines whether equity and efficiency have been improved within an urban region. The question then becomes, how do we allocate fairly the costs of municipal services among different geographic locations and income groups? This issue is explored through a study of service typologies and the design of tax-service packages in two recently amalgamated urban regions in the Maritimes. In this assessment of service types, a distinction is made between four service characteristics -- point specific, non-point specific, externality generating and non-externality generating services.

The two amalgamation case studies were selected specifically because they reveal the difficulties associated with merging urban and rural districts. The assessment of these two municipalities (the City of Miramichi, New Brunswick, and the Halifax Regional Municipality, Nova Scotia) allows the exploration of innovative arrangements in designing tax structures based on the characteristics of service types. In addition, it is demonstrated that a fair pricing regime requires public officials to recognise when subsidies should be, and when they should not be, introduced in order to ensure equity and efficiency within the urban economy.

## The Consolidation of the Miramichi Urban Community

Prior to the incorporation of the City of Miramichi in January, 1995, the Miramichi Urban Community was composed of eleven municipal jurisdictions. With a population of about 21,000, the new City of Miramichi became the fourth largest municipality in New Brunswick, after Saint John, Moncton and Fredericton. The former municipalities consisted of two towns (Chatham and Newcastle), three villages (Douglastown, Loggieville and Nelson-Miramichi), and six local service districts (Chatham Head, Douglasfield, Ferry-Road Russelville, Moorefield, Nordin and Chatham Parish). In New Brunswick, local service districts are rural areas that are unincorporated.[2]

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2. The Province provided a number of reasons for forcing the amalgamation, including inefficient competition between Chatham and Newcastle, population and investment spillovers into rural areas and outdated local boundaries (Vojnovic 1997, 1998).

Because of the commercial and residential concentration in Chatham and Newcastle, over 70% of the taxable assessment was located in the two former towns. In fact, according to Robison, a member of the provincial panel that recommended the amalgamation, among the eleven former municipalities of the Miramichi community, the region was composed of some of the "wealthiest communities in the province and some of the poorest" (Robison 1998: 190). This is evident when taxable assessment, a reflection of the municipalities' ability to raise revenue, is examined. While the average per capita tax assessment was about $58,000 for the former towns, it averaged approximately $30,000 for the villages and $27,000 for the local service districts (Burns et al 1994).

Prior to the consolidation, the 11 municipalities of the Miramichi region also had very different property tax rates corresponding to very different mixes and levels of services provided in each. Similar to the variation in taxable assessment, differences in rates were also especially important between urban and rural districts, with the tax rates in the towns being roughly 75 % higher than in the local service districts (Burns et al 1994). As Robison notes, included among the former municipal members of the region, on a per capita basis, were "the highest spending municipality in New Brunswick, … [and] also one of the lowest spending municipalities" (Robison 1998: 190). This is to be expected because, as noted earlier, rural areas generally maintain lower per capita costs in service provision mainly because they offer fewer services than urban centres.

Although different services and service standards characterised the 11 former municipalities of the Miramichi region, especially between the former towns and local service districts, once amalgamated the decision was made to harmonise the property tax rates based largely on two arguments. First, within the new municipal structure, the ratepayers of the former local service districts were now provided with access to elected representatives who had actual political power, as opposed to elected officials who functioned in an advisory capacity only. Second, it was argued prior to the consolidation that the residents of the local service districts were using many of the urban facilities located in the two former towns -- libraries and recreation centres being two examples -- without contributing financially to the maintenance and upkeep of these public amenities.

However, while amalgamation was expected to improve fiscal accountability, the merger of the municipalities and the harmonisation of the tax structure may have in fact further exacerbated the inefficiencies and inequities in the region. Since services are not standardised between urban and rural areas, but the tax rates are, or will be once the phase-in is complete, rural residents will be contributing to the financing of services from which they will derive no benefits. For instance, after the full harmonisation of tax rates, while rural residents will be paying for the maintenance of fire hydrants in the new City, these hydrants will be of little use to them because of their location -- as the closest hydrant might be located some 10 kilometres away. Other examples of urban/rural distinctions in municipal services in the City of Miramichi include sidewalks, street lighting, crosswalk guards and water and sewage lines.

In fact, prior to the amalgamation, the Local Government Review Panel that recommended this reform examined the nature of the tax structure and service provision among the eleven former municipalities. In their findings, they explicitly stated that the new municipality should not harmonise the property tax rates. The Panel recommended that in the amalgamated city, tax rates should be differentiated based on the mix, the levels and the standards of services provided in different jurisdictions. As indicated in their report, *Miramichi City: Our Future Strength Through Unity* (1994):

> "The area of the proposed new municipality is very large and the density of the population and properties varies considerably throughout. It is impractical, if not impossible, to provide equal levels of services to all persons and property, given the nature of the new community. Although levels and quality of services are likely to improve for all, certain areas are likely to receive lower levels of service than others.
>
> In the view of the Panel, the differences in types and levels of service should be reflected in the tax rate applicable to different areas of the community". (Burns et al 1994: 39).

## Considering the Structure of Tax Rates

The tax that is paid by residents on property is based on two variables, the assessed value of property and the tax rate. In New Brunswick, as for Nova Scotia, property assessment is determined on an annual basis by the Province, and is closely related to the 'market value' of the property.[3] The market value reflects what people are willing to pay for a specific property and is affected by several variables, including location of the dwelling, the services provided in the neighborhood and the condition of surrounding properties. Thus, while property assessment takes into consideration services provided in a district, this only reflects a small component of overall variations in assessment value between properties. It was for this specific reason, i.e. the inability of assessed value to take into consideration the variation in service provided between different areas, that the Local Government Review Panel recommended differences in tax rates.

A similar finding was also supported by a Tax Structure Committee in the Halifax Regional Municipality (HRM) that was responsible for designing the new tax system in the Halifax region. The Committee concluded that "variations in market value reflect variations in services, though not completely," and as a result, variations in tax rates were recommended for the newly amalgamated

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3. The Province determines the market value assessment of a property based on any one of three methods (or combination of the three): the replacement cost; the income generated by a property; or by direct comparison to the value of similar property recently sold.

municipality (HRM 1996: 7). Thus, because variations in market value assessment were not able to capture effectively differences in the levels and standards of services within the new municipality, it was recognised that the tax rates must vary within the municipality in order to ensure a fair and efficient tax structure. This issue will be discussed in greater detail later in the article.

However, in Miramichi, despite the explicit recommendations of the Local Government Review Panel not to standardise tax rates, harmonisation of the tax system proceeded after the amalgamation. As expected, the fiscal impacts of harmonisation were most severe on the local service districts. A four year phase-in formula was initially introduced in order to minimise the transition of the tax rate increase on the local service districts and the villages -- where in some cases the tax rates were expected to increase by as much as 100%. After considerable political discontent, the time frame for the full harmonisation of the rates was extended, although the impacts on the local service districts, as indicated in Table 1, has already been significant. The impact of the amalgamation on the towns' rates, on the other hand, was rather favourable. This was particularly true in Chatham, which received a 4% decrease in its tax rate the year after amalgamation. By 1997, three years after amalgamation, while the residents of the former Town of Chatham received a total tax rate increase of about half of one percent, compared to their 1994 rates, residents of Chatham Parish faced rate increases of over 80%.

The consolidation and the harmonisation of tax rates in Miramichi were considered a necessary part of the restructuring initiative, in part, to address the lack of fiscal accountability in the former tax and charge system. However, the Miramichi case study shows that ensuring fiscal accountability has nothing to do with redrawing boundaries. Achieving fiscal accountability is dependent on establishing an equitable and efficient tax-service package. For instance, with the current tax structure in Miramichi fiscal accountabilty still remains an issue of contention. The amalgamation has not been able to resolve the inequties in the tax structure within the region, instead it has simply reversed the outcome. As the rates are harmonised, rural residents are increasingly over-charged for services received. The residents of the urban areas, on the other hand, benefit from a rich bundle of municipal services while the costs of these services are distributed among ratepayers throughout the amalgamated municipality.[4]

The Miramichi experience illustrates that fiscal accountability is not dependent on amalgamation, but rather, the design of the local tax-service package. Internalising inter-municipal spillovers is only one precondition of

4. Municipalities determine the tax rate by considering two variables -- the total fiscal requirement for that specific year and the total assessed value of property. The total required funds are divided by the total taxable assessment and then expressed as a percentage or mill rate. This means that if the tax system and the rates are harmonised, everyone pays for a portion of delivering all services to the municipality, regardless of whether they benefit from these services or not.

achieving fiscal accountability, and consequently, equity and efficiency in local finances. This involves first, identifying a clear relationship between municipal services and the beneficiaries, and second, fairly distributing the costs of service provision to these beneficiaries. Thus, an equitable and efficient tax-service package cannot be effectively designed unless analysts establish a framework for determining the fair distribution of costs in the provision of municipal services. This requires a better understanding of service typologies and the distribution of service benefits, **TABLE 1 Tax Rate increases, City of Miramichi Post-Amalgmation Period, 1994-1998**

| | Tax rates (per $1,000 of taxable assessment) | | | | |
|---|---|---|---|---|---|
| Municipalities | 1994[1] | 1995 | 1996 | 1997 | 1998[2] |
| Town of Chatham | 13.095 | 12.607 | 13.035 | 13.166 | 13.166 |
| Town of Newcastle | 12.600 | 12.607 | 13.035 | 13.166 | 13.166 |
| Village of Loggieville | 11.863 | 11.851 | 12.514 | 12.903 | 12.903 |
| Village of Douglastown | 10.825 | 11.851 | 12.514 | 12.903 | 12.903 |
| Village of Nelson-Miramichi | 10.252 | 11.851 | 12.514 | 12.903 | 12.903 |
| Chatham Parish (L.S.D.) | 6.669 | 9.638 | 10.949 | 12.113 | 12.113 |
| Chatham Head (L.S.D.) | 7.162 | 9.638 | 10.949 | 12.113 | 12.113 |
| Ferry-Road Russelville (L.S.D.) | 7.360 | 9.638 | 10.949 | 12.113 | 12.113 |
| Douglasfield (L.S.D.) | 7.394 | 9.638 | 10.949 | 12.113 | 12.113 |
| Moorefield (L.S.D.) | 7.459 | 9.638 | 10.949 | 12.113 | 12.113 |
| Nordin (L.S.D.) | 8.006 | 9.638 | 10.949 | 12.113 | 12.113 |

Notes: 1. 1994 rates are the pre-amalgamation tax rates.
2. The tax rates remained the same as in 1997 because 1998 was an election year budget.

both within and outside a municipality.

## Considering a Framework in the Allocation of Public Service Costs

There are two basic criteria that can be used to determine the fair and effective allocation of municipal service costs among user groups within an urban region -- efficiency and equity. However, to understand the importance of these criteria to the municipal level of government, it is necessary to have a basic understanding of the role of local jurisdictions within the Canadian context. It has been generally accepted that municipalities have two roles. One as agencies that deliver municipal services and the other as access points for citizens to voice their opinion on the nature of local governance and service delivery that is desired by specific jurisdictions (Siegal 1980; Tindal and Tindal 1995; Vojnovic 1997). These two basic requirements generally allow residents freedom in customising both local governance characteristics and standards in public amenities.

These attributes of governance also encourage a healthy local democracy by accommodating municipal diversity. Recognising that there are distinct cultural and geographic attributes throughout Canada, and allowing these distinctions to be reflected in the governing and service delivery components of municipal functions, allows municipalities to preserve and develop distinct regional traditions and cultures. Within this context of urban governance and service delivery, where user groups can potentially customise various aspects of municipal functions, designing a fair and an effective tax system becomes important in maintaining equity and efficiency in local finances.

**Ensuring Efficiency and Equity in the Use of Municipal Services**

In a government structure where citizens are given the ability to customise municipal services according to local requirements, the user groups within a jurisdiction that receive a particular mix of services, at specific levels and standards, should be financially responsible for the cost of these public amenities. The ability to maintain a direct relationship between the beneficiaries of a bundle of services, and those that are charged for the provision of the particular service mix, ensures efficiency in the use of municipal services. Charging the user group the *actual* cost of delivering the municipal service at particular standards and levels is in itself the variable that ensures efficiency in the use of public services. If the design of a tax-service structure is able to reflect increasing costs to user groups associated with increasing levels of provision and/or standards in the service, the users will have a financial incentive to minimise waste. This fiscal incentive to minimise waste would result from the greater costs that would be associated with increased levels or standards in provision, or even inefficiencies in service use. However, there are certain conditions under which governments will pursue the deliberate under-pricing of public amenities, an issue that will be discussed more extensively below.[5]

If specific user groups are under-charged in the provision of municipal services, because no relationship is maintained between service benefits and costs, user groups will likely lobby for increased levels of provision. The users of the service would have the incentive to lobby for greater provision because

5. Under certain conditions, governments will want to under-price public services in order to ensure efficiency and/or equity. Merit goods provide another reason where active public subsidisation of goods and services is considered acceptable. In the case of merit goods, for instance, the deliberate under-pricing of goods and services is considered efficient. Merit goods are goods and services, either private or public, whose use society wants to encourage. Because of the socially desirable nature of these goods, government intervention is generally accepted through legislation or subsidies that ensure minimum service standards, service levels, or simply reductions in the price of these commodities in order to encourage consumption. Examples of merit goods that are publicly subsidised to encourage adequate standards and levels include education, publicly funded school luncheons and health services, such as free inoculation.

they would not face commensurate price increases, or perhaps even no changes in public charges whatsoever, with new levels or standards in municipal service delivery. Thus, a tax structure that does not maintain a direct relationship between service beneficiaries and public charges tends to result in inefficiencies and economic distortions within the urban economy.

A tax-service package that ensures that subgroups are charged exactly for the cost of municipal services that they receive is a charge structure that also enables public officials to obtain specific information regarding municipal service levels and standards desired by local residents. If a user group considers the current municipal services to be inadequate, and they are willing to pay higher taxes to receive customised services, local officials can receive a clear message regarding the levels and standards of service desired. Alternatively, local residents might also find that they are willing to forgo certain service levels or standards in order to pay lower taxes. Thus, a clear relationship between public charges and the costs of delivering services would not only minimise waste -- by making residents more conscious of their use and lobbying for public goods -- but it would also be an effective method of displaying to local governments specific constituent desires with respect to service levels and standards.

If a relationship is not maintained between the beneficiaries of a service and those responsible for the costs, effective lobbying might allow certain user groups to shift the costs of customised services to other subgroups within its jurisdiction, or even other municipalities. In fact, Bailey has argued that in the provision of public services "there is an incentive for sub-groups to seek to increase their share of service provision which is paid by the generality of local and national taxpayers" (Bailey 1994: 755). This incentive stems from the fact that the private short-term gains for the user groups that are able to effectively shift their costs to others, outweighs the public economic costs -- realised with inefficiencies in service provision and increases in service costs that are distributed across the larger population. The City of Miramichi experience provides one example of these cost shifts.

While the externality argument concentrates on efficiency considerations of resource distribution specifically, there are also equity aspects to ensuring that beneficiaries should pay for services from which they receive benefits. In Canada, it has generally been found acceptable that under certain conditions, groups considered to be privileged should subsidise groups considered to be under-privileged. However, no economic or political rationale supports a financial structure in which certain groups, or municipalities, subsidise others without open knowledge within the political forum that this subsidisation is indeed taking place. In addition, it is of particular importance that the political forum be informed if subsidies are provided to groups that society considers to be privileged. In fact, there is evidence that in certain cases groups considered to be under-privileged have subsidised groups considered to be privileged without any legitimate recognition by the political forum that this subsidisation had been, or still is, taking place (Vojnovic 1999a, 2000b).

In order to provide a more detailed analysis of how public service costs can be distributed fairly and efficiently among a population, an analysis of public good and service characteristics is offered in the following section of the article. In this review of municipal service typologies, the way in which public service benefits are distributed throughout a population is examined. The discussion also provides insight into designing a tax structure that ensures that everyone pays their fair share of municipal service use when there are different levels of municipal service provision, and different levels of associated costs in delivering a particular service mix within a municipality.

## Municipal Service Characteritics

Two dimensions are presented to characterise services. The first dimension is the nature of the capital investment in a service, as well as the locational and mobility characteristics of the municipal service and the service output; and the second dimension is whether externalities are generated in providing the service.

### Capital Investment, Location and Mobility of the Municipal Service and the Service Output

This first dimension distinguishes between two service categories, namely pont specific and non point specific service types. Point specific services are those services for which the capital investment and the service output are highly localised to a specific geographic area, which means that the benefits of the service are largely concentrated in its immediate surroundings. Because of the investment and the output characteristics of these services, to get the benefits of a point specific service the user has to go to a particular geographic location where the service, and the service output, can be made use of by the relevant agents. For instance, to make use of a public swimming pool, the user physically has to go to where the swimming pool is located. Likewise, the benefits of a fire hydrant are limited to a group of households in the immediate area of this amenity's investment. Other examples of point specific services include public amenities such as schools, libraries and recreation facilities.

Non-point specific services are those services for which the user does not need to be located at the particular point of service output to receive the benefits of the service. The benefit of non-point specific services can be allocated to different households or users in different locations because of the transportability characteristics of these services. Non-point specific services have a greater level of mobility than point specific services, so the beneficiaries of these services do not need to go to a specific location to receive the benefits of the service. In addition, the capital investment characteristic of non-point specific services is

flexible enough that any service line or route can be realigned at little cost. With non-point specific services, therefore, there is no specific area in which the output of the particular service investment is concentrated. Examples of non-point specific services include public transit, garbage collection, building inspection, police and fire protection, and engineering services. With all these public amenities, the transportability characteristics of the services enable the residents to receive the service benefits regardless of the user's location, within reasonable limits.

The division of services in point specific and non point specific service categories is not a mutually exclusive classification. The two categories can be seen as extremes at the ends of a continuum, with different services being characterised by different levels of service mobility and locational specificity in service output. However, the classification of services into these two categories, as demonstrated below, does enable analysts to determine the specific type of public charge that is most effective in recovering the costs of providing and maintaining specific services.

### Externality Generating versus Non-externality Generating Services

For this second dimension, two categories, externality generating and non-externality generating services are also suggested. The distinction is based on the ability of the markets to account for the benefits, or costs, generated by the provision of specific public services. Externality generating services characterise those public amenities that produce social or economic benefits (or possibly harm) that are not internalised into their price. For instance, while education and/or health care provide personal benefits to the individual users of these services, there are also extensive social and economic benefits because of an educated and healthy population that are realised by the broader economy and society. These external benefits are generally difficult to measure, and since they are not internalised in the public charge they tend to generate resource misallocations and hence social welfare losses. Because it is difficult to determine the external benefits of education and health care, there is a tendency to provide sub-optimal levels of these services, thus generating the resource misallocation. It is precisely for this reason that expenditures on education and health care are publicly subsidised. Governments strategically under-price these services to ensure advancement towards optimal levels of provision.

In the context of urban governance, analysts have been particularly concerned with cases where municipalities provide public facilities, such as libraries or recreation centres, that residents of adjacent districts regularly use but never financially contribute either in terms of the construction or the maintenance of the facility. This is a potential example of inter-municipal externality generating services, an outcome that raises concern on both grounds of equity and efficiency. In the municipal amalgamation debate, this case

represents the classic dilemma associated with externalities and fiscal non accountability.

Because large numbers of residents can potentially realise the benefits of externality generating services, the impacts of these municipal functions can be realised across large geographic areas. The fact that the impacts of externality generating services can be experienced over great distances requires a further sub-categorisation of this particular service type. Externality generating services can be classified into two sub-categories, inter-jurisdictional and intra-jurisdictional. Inter-jurisdictional externality generating services are public services that not only generate external benefits, or costs, that the market does not recognise, but the external impacts of these services are not limited to the municipal jurisdiction providing the public amenity. These services are characterised by external benefits or costs occurring beyond the municipal boundaries within which the service is provided. Intra-jurisdictional externality generating services, on the other hand, are services that have external economic benefits (or harms), but these effects are limited to the population within the municipality where the service is provided. In other words, there are no spillover benefits or costs associated with these services to surrounding municipalities.[6]

Non-externality generating services are public services whose associated benefits (or harms) have been successfully internalised by the market mechanism. In this case, it can be assumed that all residents benefiting from a specific set of public services are charged a correct levy for the provision of these public amenities. Non-externality generating services are usually services whose beneficiaries can be easily identified. As a result of being able to easily determine who benefits from a service, it becomes relatively clear who should be levied the charge for its delivery. Water provision is a classic example. Once the water is delivered to a household, very few will benefit from this public service outside the actual household. Similarly, the benefits of a fire hydrant are largely concentrated within its immediate surroundings.

This is not to say that external benefits or costs will never characterise

6. A number of variables can affect whether an externality generating service becomes inter- or intra-jurisdictional. Some of these variables include: the scope of the external benefits provided by the service; the proximity of the externality generating facility to adjacent jurisdictions; the extent to which the service or facility offers customised output; and the degree to which the relevant administration attempts to pursue the excludability of the service. For instance, a recreation centre that has specialised amenities might be attractive enough to residents of adjacent jurisdictions to induce them to travel long distances in order to make use of this particular facility. If this recreation centre does not have an administrative system that enables it to exclude non-residents from using its specialised amenities, difficulties with inter-jurisdictional spillovers might be realised with over-crowding in the facility or excessive 'wear and tear' of its equipment. On the other hand, if the recreation centre is one of many in the urban region, and offers no specialised amenities, despite its advantageous location to other municipalities it might not attract people from adjacent districts. In this case, problems associated with spillovers will be limited. This is discussed further in reviewing the Halifax amalgamation.

services classified here as non-externality generating services. However, the term implies that if non-externality generating services are characterised by externalities, very little effort needs to be dedicated to ensuring appropriate charges to internalise the benefits or harms. For instance, if appropriate charges are not placed on water provision, externalities might be generated in the delivery of this service. The introduction of water meters to households, however, would be able to address this dilemma easily.

As for externality generating services, non-externality generating services can also be classified into two sub-categories, inter-jurisdictional and intra-jurisdictional. There are instances in which the benefits of specific services will be realised beyond a single municipality's boundary, and yet these service benefits will be effectively accounted for in the pricing of the service, and the public charges will be distributed fairly to beneficiaries who reside both within and outside the municipality. In the Canadian context, there are many examples of intermunicipal agreements in the provision of public services -- either between municipalities, or between municipalities and the province. Intermunicipal agreements in the provision of recreation facilities, fire and police protection, and water and sewage treatment are common, and have been considered an effective method of delivering services particularly among smaller municipalities.

## Service Classifications and Consolidation

With respect to the pertinence of these service types to issues of municipal restructuring, and more specifically amalgamation, the argument that consolidation will improve fiscal accountability by limiting spillover benefits is limited to only one out of the four externality-related service types -- the inter-jurisdictional externality generating services. Because by definition the benefits of non-externality generating services are internalised, there are no concerns with spillovers associated with these service types.[7] In addition, since the benefits of intra-jurisdictional spillovers are limited to within the municipality where these services are provided, amalgamation cannot in any way assist with problems associated with fiscal non accountability, even though inefficiencies may persist within the municipality.

The review of these service types, and their characteristics, reveals why amalgamation itself, and the ability of mergers to internalise the inter-jurisdictional spillovers within the municipality, is at best only one pre-condition of achieving fiscal accountability, and thereby, improvements in equity and efficiency. The ability of municipal officials to design and implement an efficient

7. If any externalities are apparent with this service type, they can be easily internalised with appropriate charges.

and equitable tax-service package once the municipalities are merged becomes a vital component of the exercise. In Miramichi, for instance, all that the amalgamation accomplished was to switch the type of inefficiencies, from fiscal non accountability associated with inter-jurisdictional externality generating services, to continued inefficiencies and inequities that now result from intra-jurisdictional externality generating services.

Given the six basic service types reviewed in this paper, a service typology matrix can be constructed in order to assist in the assessment of service typologies and the design of a tax-service package (Table 2). As previously indicated, in the matrix only the top row of services (externality generating, inter-jurisdictional services) represent the service type that generates inter-municipal spillovers. In the case of Miramichi, for instance, these were the only services that required some form of charge reform or boundary restructuring to ensure that rural areas were contributing fairly towards the services that its residents were using, and in the process, internalising the external spillovers. However, in post-amalgamation, the former rural districts of the Miramichi region began to contribute financially to the delivery of all services, including the services from which the rural areas were not receiving any benefits. Again, inefficiencies

**TABLE 2 Service Typology Matrix**

| | Point Specific | Non-Point Specific |
|---|---|---|
| Externality generating (inter-juris.) | Schools<br>Recreation centres<br>Libraries | Social services |
| Externality generating (intra-juris.) | Schools<br>Recreation centres<br>Libraries | Social services |
| Non-externality generating (inter-juris.) | Fire hydrants<br>Local sidewalks<br>Streetlights | Garbage collection<br>Building inspection and standards |
| Non-externality generating (intra-juris.) | Fire hydrants<br>Local sidewalks<br>Streetlights | Garbage collection<br>Building inspection and standards |

resulting from the lack of fiscal accountability still persist within the amalgamated municipality, but now they are internalised within the new municipal boundary of the City.

The point specific and non-point specific service classification also reveals that concerns over fiscal accountability could easily be handled with the imposition of user fees on point-specific services. Because of the point specific characteristics of services such as schools, recreation centres and libraries -- services that require beneficiaries to go to a specific location to obtain the benefits of the service -- introducing user fees at the point of the service output

becomes an efficient method of internalising the externality. The administration of point-specific public facilities can be easily organised so that a person who is not a resident of the municipality that is delivering a service must pay a fee to gain entrance to the facility. In fact, this organisation of the charge structure is very efficient and equitable in dealing with internalising spillovers since the people outside of the jurisdiction who contribute to the funding of this service are limited to those who are actually using the public amenity.

Alternatively, in the case of an amalgamation, and the distribution of the costs of providing these facilities through revenue tools such as property taxes, the costs would be distributed across the entire population. In such instances, problems of fiscal accountability still exist, but their characteristics are different. If all residents in a municipality do not benefit from the services provided in their jurisdiction, but they are all contributing financially to the maintenance of these public amenities through taxes, the externality and the associated inefficiencies would still be apparent, but they would be intra-municipal as opposed to inter-municipal.

From the service typology assessment, it is clear that when dealing with inefficiencies resulting from inter-municipal spillovers, only inter-jurisdictional externality generating, non-point specific services require some form of boundary restructuring to address the spillover dilemma. This restructuring does not necessarily require amalgamation per say. Inter-municipal agreements or the introduction of special purpose agencies are alternatives that would in all likelihood be less costly, given the restructuring expenses associated with municipal mergers. However, since fiscal accountability is only one of many objectives that consolidations are expected to contribute to, an urban region might still consider a merger the most effective option, depending upon its circumstances. Nonetheless, in the specific case of Miramichi, the above review illustrates that the spillovers in the regions could have been effectively solved through the introduction of user fees on inter-jurisdictional externality generating, point specific services.

## Service Classifications and Subsidies

The service typology assessment can also be used to determine municipal subsidy characteristics when a province is pursuing an optimum pricing regime for local services. Under certain circumstances municipal services might need to be deliberately under-priced in pursuit of equity or efficiency. Understanding the distinction in service types can provide considerable insight regarding the design of the subsidy. For instance, non-externality generating services require subsidies that are very specific to particular municipalities or regions, in response to particular conditions characterised by inequities or inefficiencies in the delivery of these services. Because we are aware of the beneficiaries of these services, the identification of inefficiencies or inequities to regions where these

amenities are provided should be relatively clear. Selecting deliberate under-pricing as an option should be in direct response to a particular sub-optimal condition associated with the lack of provision of these services to specific regions. Simply put, we would not want to subsidise regions that are not confronting inefficiency or inequity dilemmas in the provision of these services, despite the fact that municipalities might lobby for these grants. Subsidies directed at non-externality generating services could thus be thought of as local benefit subsidies, and should be strategically limited to particular areas in need. This requires some form of municipal evaluation that would select the municipalities to receive subsidies for this group of services, and not a general subsidy, such as a province wide grant.

Since the benefits of externality generating services are significantly more difficult to evaluate, general subsidies would be more appropriate for these service types. A Province might determine that municipalities that maintain a particular legal status -- village, town and so on -- and have a per capita taxable assessment below the provincial average, or an average household income below a certain level, should receive a subsidy of a specific percentage on the provision of these services. The distinction between point specific and non-point specific externality generating services introduces one other differentiation between the externality generating service types. Because point specific services maintain output that is highly localised, a local benefit subsidy might be needed in addition to the general province wide subsidy to ensure adequate standards of point specific externality generating public facilities in particular areas. Under certain circumstances, public amenities will need to be upgraded in certain regions -- such as libraries, recreation centres, or schools -- in order to meet acceptable minimum standards.

In order to develop the analysis on designing tax-service packages and subsidy types further, a review of the amalgamation experience in the Halifax-Dartmouth region is presented to provide an alternative proposition to that of Miramichi's in the pursuit of efficiency and equity in local restructuring initiatives. This analysis illustrates how the understanding of service characteristics can be applied to assist in the design of a new tax-service structure after a municipal restructuring.

## The Amalgamation of the Halifax-Dartmouth Region

The Halifax Regional Municipality (HRM) was incorporated in April of 1996 after the mergers of the Cities of Halifax and Dartmouth, the Town of Bedford,

and Halifax County.[8] The area of the newly amalgamated HRM is approximately 6,000 square kilometres. Over 70 % of the population of the HRM, about 343,000 people in 1996, is concentrated on 5 % of the land surrounding Halifax Harbour. The rural areas of the new City, which represent over 50 % of the land, contain only about 3 % of HRM's population.

Prior to the amalgamation, the former municipalities of HRM maintained a relatively complex tax system, with four residential base rates, four commercial base rates, and over 250 area property tax rates in Halifax County. Halifax County maintained a unique financial and government structure that allowed many aspects of efficient service delivery to be realised within this former municipality. The former County had over 250 area property tax rates corresponding to the specific service package that was provided in each of the districts. An example is given in Table 3, which shows distinctions in service provision between Sackville and Hubbard, two districts located in the County.

In the 1996-1997 fiscal year, customisation to the base services provided in Sackville added $6.50 per $1,000 of assessment to the base County tax rate of $8.95 per $1,000 of assessed value. This included customisation of a number of services, including garbage collection, recreational services, street lights, schools, transit, cross guards, sidewalks, police and fire protection. In comparison,

**TABLE 3 Area Property Tax Rates[1] in Halifax County -- Sackville and Hubbard, 1996/97**

| Sackville | | Hubbard | |
|---|---|---|---|
| Base Rate: | $8.95 | Base Rate: | $8.95 |
| Additional Tax For: | | Additional Tax For: | |
| $6.50 | | $2.30 | |
| Garbage collection | | Garbage collection | |
| Recreation | | -- | |
| Street lights | | Street lights | |
| Schools | | Schools | |
| Transit | | -- | |
| Cross Guards | | -- | |
| Sidewalks | | -- | |
| Police | | -- | |
| Fire protection | | Fire protection | |
| Total Tax Rate: | | Total Tax Rate: | |
| | $15.45 | $11.25 | |

Note: 1. All Tax Rates are per $1,000 of assessed value.
Source: HMR (1996: 25).

8. As in the case of Miramichi, the Province forced the consolidation of the Halifax-Dartmouth region. A number of variables likely influenced the Province of Nova Scotia's decision. Some of these factors included: expected cost savings in the delivery of municipal services (as proposed by Hayward (1993)); inefficient competition by the Cities of Halifax and Dartmouth which was said to hinder economic development in the region; expected improvements in regional planning and physical service provision; and a provincial-municipal service exchange that placed Halifax County into a critical financial position. (Vojnovic 1997, 1998, 1999b).

a ratepayer in the Hubbard area had a total property tax rate of $11.45 per $1,000 of assessment -- adding only $2.30 per $1,000 of assessed value for a more limited customisation in the provision of garbage collection, street lights, schools and fire protection. (HRM 1996)

With over 250 area property tax rates in the former county, a relatively clear relationship was maintained between the provision of customised services, the beneficiaries of these services, and the individuals responsible for their costs. However, it had been recognised among the four former municipalities that, just as in the case of Miramichi, residents of the County frequently made use of the services in the urban areas without paying their fair share. Problems associated with spillovers had become especially apparent with the congestion of schools in former Halifax and Dartmouth. Because of a supplementary education levy, which was added to the Provinces' standard school levy, Halifax and Dartmouth offered more customised education services and facilities. Since the reputation of the schools in the two Cities was well known, families that lived in Halifax County -- close to the boundaries of Halifax and Dartmouth -- would send their children to schools in the two former Cities. While this produced overcrowded schools in the Cities of Halifax and Dartmouth, many schools in Halifax County, close to the boundaries of the two former Cities, had empty classes.

As in the case of Miramichi, the problem was how to design a tax structure after the consolidation that would account for inter-jurisdictional spillovers, while ensuring that the rural residents were not over-charged. However, unlike the case of Miramichi, in Halifax Regional Municipality it was recognised that services were provided at different levels and standards between urban and rural areas, and that these differences should be recognised through variations in property tax rates. In fact, the recognition of this service distinction, and its implementation in the design of the new tax system, was guaranteed with an explicit requirement in the *Halifax Regional Municipality Act (1995)* to introduce a multiple rate structure in the new municipality. In Subsection 82 (8a) of the *Halifax Regional Municipality Act (1995),* it explicitly states that:

> "the Council shall authorise the levying and collecting of a separate rate for the area of the Regional Municipality determined by the Council to be a rural area receiving a rural level of services sufficient to raise the amount estimated to be required to defray an amount not exceeding the area's share of the net cost to the Regional Municipality of providing general administration, planning, development control, building and protective inspections, social services, contributions to a school board, contributions to a regional library, industrial or business development and attraction, and solid waste collection and disposal, including waste diversion; …" (Nova Scotia 1995: 40).

In the first round of tax structure proposals, two services were classified as being "urban in nature" -- public transit and fire hydrants. The provision of

these two services was limited to urban areas and as a result it was considered that their benefits would largely accrue to urban residents. This initial recognition of service differences between urban and rural areas led to a more comprehensive analysis on the cost distinctions in service provision between different locations within Halifax Regional Municipality.

Given that the new City encompasses an area of about 6,000 square kilometres, differences in service levels and standards between different areas of the amalgamated municipality vary significantly. After the assessment, it was concluded that the tax rate differentials between urban and rural areas should reflect the absence of public transit, fire hydrants, streets, street lights, sidewalks, sidewalk snow plowing, specialised education services and recreation facilities in the rural districts. In 1997, a dual rate structure was proposed to recognise the differences in services between urban and rural areas. However, within months of the dual rate structure proposal, the Council and the HRM administration had modified the urban and rural rate structure into a comprehensive tax system that established three base rates within the new amalgamated municipality and over 60 area rates. In Table 4, three base rates (rural, suburban, and urban) are shown with two additional customised rates applied to the former Cities of Halifax and Dartmouth.[9] The Halifax and Dartmouth rates include a supplementary educational levy of $1.41 per $1,000 of assessed value for former Halifax and $1.07 per $1,000 of assessed value for former Dartmouth.

The urban and the suburban rates are distinguished by the lack of provision of public transit, sidewalks and fire hydrants in areas of the City that have become classified as suburban for tax rate purposes. While there has been considerable lobbying by the residents in establishing the boundary, some basic rules have been developed to define the process. For instance, the fire protection

**TABLE 4 Adopted 1997/98 and 1998/99 Tax Rates[1] for the Halifax Regional Municipality**

| | 1997/98 Residential Rate | 1997/98 Commercial Rate | 1998/99 Residential Rate | 1998/99 Commercial Rate |
|---|---|---|---|---|
| Former City of Halifax | 15.12 | 38.72 | 15.41 | 39.31 |
| Former City of Dartmouth | 14.86 | 37.87 | 15.07 | 38.46 |
| Urban | 13.79 | 35.15 | 14.00 | 35.72 |
| Suburban | 12.32 | 34.19 | 12.51 | 34.76 |
| Rural | 10.25 | 28.44 | 10.40 | 28.87 |

Note: 1. All Tax Rates are per $1,000 of assessed value.
Source: HRM (1998).

levy is determined by the proximity of housing to a fire hydrant. All properties within 1,200 feet of a fire hydrant pay a levy which amounts to $0.38 per

9. The 1998-1999 rates remain unchanged for the 1999-2000 fiscal year.

$1,000 of assessed value for residential property and $0.96 per $1,000 of assessed value for commercial property.

Areas of the new City that are not levied standardised charges for area specific services -- that among others include public transit, streetlights, sidewalks, crosswalk guards and recreation services -- pay rural rates. A more intricate breakdown of the HRM tax structure, and the rates associated with different public services, is provided in Table 5. As the detailed breakdown of the tax structure shows, considerable effort in the Halifax Regional Municipality has been devoted to ensuring that a clear relationship is maintained between the beneficiaries of services and those responsible for the costs. In the 1998-1999 fiscal year, in the areas considered rural, there are approximately 60 different area rates that reflect the different standards and levels of services provided in the various districts of the new municipality. An example of the variations among area rates associated with sidewalks, sidewalk ploughing, public transit, streetlights, crosswalk guards and fire departments is shown in Table 6.

Area rates in the new municipality were not only accommodated under Part 6 of the *HRM Act*, but also with the introduction of community councils. Community councils are political and administrative bodies that consist of at least three polling districts within the newly amalgamated municipality. Part 3 of the *HRM Act* not only allowed areas of the amalgamated municipality to adopt community councils, but also gave these councils substantial powers. With approval from the regional government, the residents within their relevant community council can determine the services and area rates in each of the districts. As authorised under 31(1) of the Act "a community council may determine expenditures that should be made in or for the benefit of the community and that are to be recovered from the ratepayers of the community by area rates" (Nova Scotia 1995: 15).

Within HRM, the introduction of community councils in the amalgamated municipality promotes a healthy local democracy by enabling residents to determine the characteristics of the service packages provided in their districts.

**TABLE 5 The Structure of the Tax Rates for the Newly Amalgamated HRM, 1997/98**

| | Rural Rates *(Excludes area rates)* | Suburban Rates | Urban Rates | Dartmouth Rates | Halifax Rates |
|---|---|---|---|---|---|
| Tax rate prior to equalisation payment | 10.75 | 12.25 | 13.73 | 14.80 | 15.06 |
| Equalisation Transfer | -0.50 | 0.07 | 0.07 | 0.07 | 0.07 |
| Final Tax Rates | 10.25 | 12.32 | 13.79 | 14.86 | 15.12 |
| Area Tax Rates: | | | | | |
| Supplementary Education - Halifax | -- | -- | -- | -- | 1.40 |
| Supplementary Education - Dartmouth | -- | -- | -- | 1.07 | -- |
| Hydrants (1200 feet) | -- | -- | 0.38 | 0.38 | 0.38 |
| Fire Departments | -- | 1.12 | 1.12 | 1.12 | 1.12 |
| Transit | -- | -- | 0.61 | 0.61 | 0.61 |
| Sidewallks, Leaf, Litter pick-up, etc. | -- | -- | 0.41 | 0.41 | 0.41 |
| Streetlighting | -- | 0.21 | 0.21 | 0.21 | 0.21 |

| | | | | | |
|---|---|---|---|---|---|
| Recreational and Community Facilities | -- | 0.12 | 0.12 | 0.12 | 0.12 |
| Crosswalk Guards | -- | 0.06 | 0.06 | 0.06 | 0.06 |
| Other | -- | -- | -- | -- | -- |
| General Tax Rate: | | | | | |
| Regional Operations (Streets, Solid Waste etc.) | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 |
| Sportsfields and Playgrounds | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| Parks and Natural Services | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 |
| Police | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 |
| Community Services (Recreation, Planning, etc.) | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Fire (Administration, Training, and Prevention) | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 |
| Corporate Services, CAO, and other | 2.14 | 2.14 | 2.14 | 2.14 | 2.14 |
| Debt Charges | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| Provincial Property Taxes | 4.39 | 4.39 | 4.39 | 4.39 | 4.39 |
| Other Revenues | -2.87 | -2.87 | -2.87 | -2.87 | -2.87 |

Source: HRM (1997).

The setting of the area rates within each of the districts ensures efficiency by establishing clear relationships between the customisation of services and the individuals responsible for the associated costs. Both the citizens and the government officials within this tax-service structure have a clear understanding of the service package desired and its specific costs. Such an organisation limits the ability of subgroups to shift the costs of customised services from which they receive benefits to other subgroups that are not using these public amenities.

In designing the tax structure, the HRM administration and Council also took into consideration the fiscal capacity of the former municipalities. An equalisation transfer of 50 cents per $1,000 of assessed value is provided to areas of the new municipality that are considered rural (Table 5). This grant was introduced in the newly amalgamated municipality to recognise that rural areas did not have the financial capability to provide what were considered adequate levels and standards of services within their districts. As indicated by Bruce Fisher, the Senior Financial Consultant in HRM, "since assessed value can vary widely in

**TABLE 6 Area Rates[1] within the Halifax Regional Municipality, 1998/99**

| **Sidewalks** | | **Fire Departments** | |
|---|---|---|---|
| Waverly | 0.07 | Bay Road | 1.02 |
| Fall River | 0.50 | Beaverbank | 1.39 |
| | | Black Point | 2.17 |
| | | Chezzetcook | 1.34 |
| **Sidewalk Ploughing** | | Cook's Brook | 1.40 |
| Waverly | 0.11 | Dutch Settlement | 1.16 |
| Fall River | 0.11 | Milford Station | 0.86 |
| | | Hammonds Plains | 1.10 |
| | | Harrietsfield-Sambro | 1.90 |

| | | | |
|---|---|---|---|
| **Transit** | | Herring Cove | 1.80 |
| Hammond Plains | 0.17 | Lake Echo | 1.72 |
| Lake Echo/Porters Lake/Grand Desert | 0.45 | Lakeside | 1.54 |
| Beaver Bank | 0.59 | Lawrencetown | 1.59 |
| | | Meaghers Grant | 1.30 |
| | | Middle Musquodoboit | 1.00 |
| **Streetlighting** | | Mooseland | 2.00 |
| District 1 | 0.77 | Moser River | 1.50 |
| District 2 | 0.32 | Mushaboom | 1.00 |
| District 3 | 0.30 | Musquodoboit Harbour | 1.40 |
| District 18 | 0.49 | Ostrea Lake | 1.80 |
| District 19 | 0.73 | Oyster Pond | 1.20 |
| District 22 | 0.44 | Port Dufferin - Three Harbours | 1.30 |
| District 23 | 0.24 | Prospect Road | 1.50 |
| | | Seabright | 0.80 |
| | | Sheet Harbour | 1.50 |
| **Crosswalk Guards** | | Tangier | 0.90 |
| Harriets field | 0.06 | Upper Hammonds Plains | 3.72 |
| Hatchett's Lake | 0.06 | Upper Musquodoboit | 1.20 |
| | | Enfield | 0.68 |
| | | Zone 4 | 1.18 |

Note: 1. All Auto rates are per $1,000 of assessed value.
Source: HRM (1998).

a municipality" equity needed to be considered in designing the tax structure.[10] Fisher's example of fire departments illustrates the nature of the City's concerns:

> "In HRM there are 31 different tax rates for fire service each with its own level of service. The relatively wealthy areas of the urban core share a common rate of about 12¢ while rural areas have area rates which range from just under 9¢ to over 37¢ per $100. Yet the urban core's large commercial and residential tax base allows it to spend more per capita while maintaining a relatively modest tax rate. Hence taxpayers outside the core can have a higher area rate but a lower level of service. Municipal government has to consider not just the financial and management implications of delivering service in such a manner,

10. The quote is taken from an email received by Bruce Fisher on September 13, 1999. The email was one of an extensive series of exchanges via email and personal discussions on this topic over a period of over 6 months.

but the equity aspects."[11]

The political discussion regarding the equalisation transfer initially emerged because of the difficulties confronted with overcrowding in City schools. It was concluded that the best solution to ending the pressure on urban area schools would be through subsidising the rural areas so that they could improve their education facilities, thereby minimising the need for rural residents to send their children to urban schools. The concentration of commercial assessment in the former Cities also made this equalisation transfer politically acceptable. This initiative, therefore, was a result of a specific strategy by both the Council and the City's administration that was dedicated to addressing the distinctions in fiscal capacities between different districts -- leading to the active subsidisation of public amenities in order to encourage efficiency and equity.

## Conclusion

Despite the advocacy that the merger of municipalities and the restructuring of boundaries can address inefficiencies and inequities associated with municipal spillovers, it has been argued in this paper that amalgamation, at best, is merely a precondition for dealing with the absence of fiscal accountability in an urban region. This is particularly true when the merging municipalities maintain considerable variations in service provision, which might continue even in the post-amalgamation structure. The merger of urban and rural regions generally provides such examples, and these municipal consolidations remain one of the most difficult forms of mergers. The secession of the Headingly area in 1992, a rural portion of the Winnipeg Unicity area, is a reminder of the difficulty in merging urban and rural areas.

The design of an equitable and efficient tax-service structure is ultimately the variable that can ensure fiscal accountability in an urban economy. If inter-jurisdictional spillovers are generating inefficiencies and inequities within an urban region, it is not municipal consolidation that can internalise the externality, but rather the redesign of the tax-service structure. This will not only involve establishing a clear relationship between the beneficiaries of the service and those responsible for the costs, but also strategically determining when public goods and services should be under-priced in order to promote equity and efficiency within the urban economy.

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11. The quote is taken from an email received by Bruce Fisher on September 13, 1999. The email was one of an extensive series of exchanges via email and personal discussions on this topic over a period of over 6 months.

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