Local Unit Alignment, Reorganization, and Consolidation Commission

Overview of the Literature Review and Analysis on Five Subjects Related to the Cost-Efficiency of Municipal Government

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# Table of Contents

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Report</td>
<td>3</td>
</tr>
<tr>
<td>Conclusions from the Reviews of the Literature</td>
<td>5</td>
</tr>
<tr>
<td>• From the Literature Review and Analysis Related to Optimal Municipal Size and Efficiency</td>
<td>5</td>
</tr>
<tr>
<td>• From the Literature Review and Analysis Related to Municipal Government Consolidation</td>
<td>7</td>
</tr>
<tr>
<td>• From the Literature Review and Analysis Related to Costs and Benefits of Service Delivery Consolidation among Municipalities</td>
<td>9</td>
</tr>
<tr>
<td>• From the Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Efficiency</td>
<td>11</td>
</tr>
<tr>
<td>• From the Literature Review and Analysis Related to Measurement of Local Government Efficiency</td>
<td>13</td>
</tr>
<tr>
<td>An Integrated Analysis of the Conclusions</td>
<td>15</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus prepared five analyses for the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) and presented five reports early in 2009. This report analyzes the results of those literature reviews on municipal cost-efficiency in service delivery as affected by municipal size, municipal consolidation, service consolidation and alternative service delivery arrangements, as well as the review on the measurement of municipal efficiency. The major findings are these:

- Consolidation of municipalities has not been effective in increasing efficiency of municipal service delivery.
- The relationship between the size of the population served and efficiency is not consistent for the delivery of different service types.
- Size is associated with economies of scale for capital-intensive services and highly specialized services, resulting in greater efficiency in larger governments.
- Size is associated with diseconomies of scale for labor-intensive services, suggesting greater efficiencies in smaller governments.
- The most common measure of municipal efficiency is cost per capita.
- The literature considers the cost per capita metric greatly flawed due to inconsistencies of measurement and accounting in different jurisdictions.
- Performance measurement systems have addressed inconsistencies in measurement and accounting in order to provide valid comparative benchmarking.
- Benchmarking between jurisdictions has been effective in identifying performance improvements and cost savings.
- Data-based management review systems, such as the “CitiStat” or “CompStat” models, are effective at improving operational efficiencies.
- The perception is that sharing of services is effective in promoting efficiency of service delivery.
- Sharing and other forms of service consolidation are encouraged despite their logical reliance on economies of scale; the literature promotes sharing, even for services that demonstrate no economies of scale in studies of size and efficiency.
- Of the several modes of delivering municipal services, the most common is direct delivery by the municipality; the next most common is shared service delivery.
- Privatization and regionalization, provided by special districts or centralized governments, such as counties, provide increased efficiency in some implementations.
• Hybrid delivery arrangements, such as regionalized service delivery combined with a regional council or policy group, are appealing as alternatives to reduce the potential loss of local control that might result from consolidated service delivery arrangements.

• Hybrid forms of delivery foster the matching of different service delivery arrangements to the characteristics of specific service types, such as labor-intensive or capital-intensive services. For example, two-tier governments may provide regionally based water services through a special district, police patrol through the local municipalities, and economic development through the county.

• No service delivery arrangement is universally efficient, suggesting that a municipality always needs to complete a realistic, full cost evaluation of the projected results of an alternative service delivery arrangement before implementation.
Purpose of the Report

On March 15, 2007, New Jersey enacted the law creating a state commission, the “Local Unit Alignment Reorganization and Consolidation Commission” (P.L.2007, c.54). This law charged LUARCC with the responsibility to study and report on the structure and functions of county and municipal government. The study of the appropriate allocation of service delivery from the standpoint of efficiency was among the many responsibilities assigned to LUARCC.

An unprecedented special legislative session convened in June 2006, with the goal of enacting property tax reform, resulted in the enactment of this law. The legislature formed four bicameral, bipartisan joint committees, one of which was the Joint Committee on Government Consolidation and Shared Services, following Governor Corzine’s address to a joint session of the Legislature. The creation of a permanent commission (LUARCC) to facilitate municipal consolidation and the sharing of services among local units was one of the recommendations of that Joint Committee.

A principal assumption of the legislation creating LUARCC is that there are inefficiencies associated with the multiple municipal governmental units that exist in the State. The legislation suggests that municipal consolidation, particularly directed at the smaller municipalities, will result in more cost-effective government.

Accordingly, the legislature charged the commission with developing recommendations to improve the delivery of local government services. These recommendations may range from suggestions to share specific services to the realignment of local government units, including possible municipal consolidations, the merging of specific existing autonomous agencies into parent municipal or county governments, or the sharing of services between or among municipalities and other public entities.

As a step toward fulfilling this charge, the commission determined it would conduct a systematic review of the literature to determine the extent of existing data, studies, theories, gaps in the literature, and conclusions concerning whether consolidation of municipalities results in a more cost-efficient government. Following the issuance of scopes of work for five separate projects, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus beginning October 6, 2008 to conduct a review of the literature on five different subjects related to the efficiency of local government.

The five reports submitted to LUARCC are:

- Literature Review and Analysis Related to Optimal Municipal Size and Efficiency
- Literature Review and Analysis Related to Municipal Government Consolidation
Literature Review and Analysis Related to Costs and Benefits of Service Delivery Consolidation among Municipalities

Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Efficiency

Literature Review and Analysis Related to Measurement of Local Government Efficiency

Conducting the Five Studies

Each of the five reports describes the methodology employed for the five literature searches in detail. The overall strategy was the same for each subject. Focusing on the academic literature, specific search terms for each of the subjects were applied against approximately thirty bibliographic databases and other information resources. Senior research associates, under the direction of faculty supervisors, evaluated the initial sources found in the search to determine which were appropriate to include in the study. The researchers examined and annotated the sources that were selected. Findings in these sources, which were appropriate to LUARCC’s research questions, were recorded and used to create each of the five reports that resulted from these studies.

An important part of the work products specified in the contract is the annotated bibliography. Each of the five reports contains an annotated bibliography, with only the references appropriate to the subject of the individual report. The entire annotated bibliography for all five studies contains over 250 resources. SPAA has provided LUARCC with a copy of the software used to compile this bibliography (EndNote®, a high-quality bibliographic software program by Thompson Reuters) and the associated database created for this project, which includes the specific findings in each of the references.

The full text file from the original source is accessible through EndNote® or independently, usually as a PDF or Word document. In a few cases, a web link is provided or the reference is to a book, which is not included in the group of files provided to LUARCC.
Conclusions from the Reviews of the Literature

Each of the five reports commissioned by LUARCC presented the major conclusions from the literature, as expressed by the purpose of the literature review stated in the scope of work on that subject. This summary report lists the conclusions from each of the five reports containing the literature reviews.

From the Literature Review and Analysis Related to Optimal Municipal Size and Efficiency

Although the literature does not reveal strong and consistent relationships between size and efficiency in the delivery of local government services, some relationships are evident. The first relationship describes the overall effect of size of government on efficiency. The second and third statements show that the general relationship does not hold when specific services are considered. The fourth point, about the difficulties of measuring efficiency, is very important in the determination of what promotes municipal efficiency:

• The Inverted U-shaped Curve

There is an inverted U-shaped relationship between size and efficiency on a general level. Efficiency increases with population size up to about 25,000 people, at which point it is stable until size is about 250,000 people, and efficiency declines with increasing population size after that. The inverted U-shaped curve that describes the relationship between municipal size and efficiency offers two opportunities for improvement: the very smallest and the very largest governments. The literature defines the smallest as populations less than 20,000 to 25,000. The largest are municipalities with populations in excess of 250,000, which is a limited pool in New Jersey. However, in the one reference from the literature search that specifically studied New Jersey (Gabler, 1969), the diseconomy at the largest end of the spectrum was more uniformly pronounced than in two other states to which it was compared. The literature suggests New Jersey should examine its largest governments as well as its smallest governments for ways to increase efficiencies.

• Service Specific Relationships

The most important finding other than the inverted U-shaped curve was the difference in the relationship between size and efficiency in capital based services as opposed to labor-intensive services. Efficiency gains are related to size for capital or infrastructure intensive services such as sewer and water. The literature supports the finding that this same concept is operative for seldom used and specialized services, such as a high technology crime lab.
This suggests that contracting, sharing, or receiving specialized services from a larger entity can make selected services more efficient.

- **Labor-Intensive Services**

  Labor-intensive services are more efficient in smaller governments. The literature only offers burdens of management control and excess administration in larger governments as an explanation for such inefficiencies. Reduced levels of services and expectations in smaller towns may also be operating to reduce costs. This finding of increased efficiency in smaller units is an important conclusion, because the literature attributes over 80 percent of governmental cost to labor-intensive services including police, fire, and education.

- **Complexity of Measuring Efficiency**

  An additional finding from the literature is the difficulty in determining one measure of efficiency that works well at the level of a municipality or even for a service area. The most common basis for a measurement of efficiency is expenditure data, which is the numerator in the cost per capita indicator used throughout the literature. Varying definitions of expenditure measures across jurisdictions are the culprit in the comparability of this indicator. LUARCC has begun to evaluate the possibility of using municipal expenditure data in New Jersey to examine efficiency and the factors that promote it. While a difficult task, this makes a great deal of sense, because of the ability to attempt to control some of the confounding influences.

Finally, we must recognize that there are many inconsistencies in the literature. Even the most consistent findings of the inverted U-shaped curve and the relationship for capital-intensive versus labor-intensive services have variations supported by some authors. For example, we could not reconcile the debate over police responsiveness and inefficiency in small versus large units. Different authors observed greater managerial efficiencies in small units, but others saw relative efficiencies in large units. The literature does not provide a high level of confidence for further action on a systematic and broad basis.
From the Literature Review and Analysis Related to Municipal Government Consolidation

If the question is “Do we consolidate and where?”, the literature review shows there is not adequate information to say “yes” or “no,” and there are certainly not concrete criteria to follow through on a “yes” answer. The literature indicates that governments have achieved only a small portion of the attempted consolidations, and the results of those achieved are mixed.

- **Cost Savings Are Not Assured**

  The literature does not consistently support the general belief that increasing the size of municipalities will lead to cost savings. The overall inverted U-Shaped curve relationship between population size and costs per capita masks the details of size relationships that vary with the nature of the service being delivered.

- **Implementation of Consolidation Is Costly and Time Consuming**

  Transitional costs can be substantial if the consolidated government requires new facilities or infrastructure. It will normally take years to complete a consolidation. It is a complex task to achieve, as opposed to simply assuming a better organizational culture and better procedures in the merged government.

- **Savings Only Result from Reductions in Resources**

  There is a tendency to create a wage and benefit structure that rises to the highest wage levels of the pre-merged governments. The merger must be evaluated as to how positions, equipment, or facilities can be reduced, if not immediately, then in the long run, so that these savings will balance the costs of the transition. The on-going costs resulting from higher uniform service levels and wage and benefit structures among merged municipalities are another major consideration.

- **Most Consolidation Attempts Fail**

  Governments have not achieved the majority of recent voluntary attempts at consolidation. Of those that have been achieved, the results, measured in terms of costs savings or improved quality or responsiveness of service delivery, are mixed.

- **Politics Is an Obstacle**

  The literature most often cites political considerations, running the gamut from multiple concerns of the public to concerns of political parties about
shifts in the balance of power, as the most significant obstacles to consolidation

Evaluations of potential mergers must be specific to the needs and situations of the communities involved. The mere attempt to consolidate often focuses an evaluation on ways other than consolidation to achieve increased efficiencies, even when the merger of governments does not result. This “unintended consequence” has led to better arrangements for service delivery in many situations.
From the Literature Review and Analysis Related to Costs and Benefits of Service Delivery Consolidation among Municipalities

The literature supports the assumption that inter-governmental cooperation can provide cost and quality efficiencies. In addition to discussing the benefits of shared services and other forms of cooperation, the literature provides insights into how to increase the amount of service delivery consolidation:

- **Quality Improvements**

  Most shared services success stories assess cost savings, but some of these cases state that improvements in service delivery and quality should be the primary motivator in forming shared services. Sharing seldom reduces quality of the service, and often sharing improves quality. Quality issues are the sole motivation for some arrangements.

- **Providing High Cost Service Improvements**

  There are functional service areas, such as information technology, in which local government has made only limited investments. Traditionally, this is because the government perceives the costs to be unpalatable to the citizenry. Service sharing offers the potential for quality improvement in areas such as this, without incurring the skepticism of the public about expensive investments.

- **Case-by-Case Resolution of Obstacles**

  Although there are hurdles to implementation of shared services, they are situation-specific, and should be assessed and resolved in forming an agreement. There are a great many successful shared service arrangements. Even the concern with loss of local control or local delivery of the service is an infrequently mentioned obstacle in the literature.

- **Public Safety Services**

  Reports from around the country indicate a reduction in public safety costs is possible. The transfer of police, fire, and dispatch services to other units of government are common potential efficiencies cited in the literature. Police and fire are difficult services to consolidate, because of the public’s concerns with safety (in terms of response times) and organized labor’s concerns with employment security.

- **State Encouragement**

  Evidence shows that governments want to do more service sharing than they actually accomplish. States are trying to encourage collaboration through
grant and education programs. Some have tried to launch more of an outreach program, and others have tried to create databases of needs to meet through sharing.

- **Need for Focus**

Successful shared services require planning. Probably the greatest obstacle to doing what everybody seems to want – shared services that result in economies – is not spending the time and detailed effort to focus on it. The fact that most sharing arrangements come from informal networks and contacts is testimony to the fact governments do not spend enough time thinking about how to be efficient. They need to be encouraged to invest time and resources to do so.

- **Incentives to Productive Organizations**

Grants, such as New Jersey made available to develop county offices dedicated to promoting shared services, create incentives and the focus to evaluate more cost-effective strategies. These state grants to counties are a good step in the direction suggested by the Somerset County Business Partnership’s proposal to fund effective sharing organizations in order to continue their successful work.

- **Positive Effects of Fiscal Stress**

Fiscal and budgetary pressures also encourage cooperation between units of government. Conversely, aid or grants, which maintain a service, are disincentives to finding alternative service delivery arrangements.

Finding the right level of government to deliver a service is an important concern of LUARCC. In addition to the consolidation of services discussed in this report, the report *Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Efficiency* discusses some other mechanisms to move service delivery to the appropriate government, including centralized government, special districts, and regional delivery structures.
From the Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Efficiency

This report reviewed varied approaches to service delivery arrangements. However, it is not obvious from what is found in the literature how to compare these approaches, much less propose an optimal array of service delivery arrangements. This area of alternate structures for service delivery is new and evolving, which makes the task of developing concrete conclusions more challenging.

The literature highlights the following arrangements as providing efficient and effective solutions for delivering public services:

- **Contracted Services**
  
  Shared services can increase efficiency while retaining local control. The numbers show that a private contractor may be more efficient only if the municipality can monitor the contract adequately.

- **Special Districts Provide Specific Service Expertise**
  
  Special districts (authorities and fire districts, for example) provide a focused area of expertise, but possibly at the cost of greater fragmentation, redundancy of general administrative functions, and loss of accountability. Regionalized special districts mitigate the increase in fragmentation and redundancy, but make accountability more distant.

- **Centralized Services Provide Scale Economies**
  
  County or regional service provision is attractive for those services (infrastructure related or highly specialized) that show economies of scale, but there may be a need to provide representation of the constituent municipalities in order to assure local control.

- **Joint Boards for Specific Functions**
  
  Joint boards are effective for unique services that are best provided over a broader area (for example, land use planning and economic development) and may provide local representation in determining how the service will be delivered.

- **Regional Policy Groups Increase Local Control for Varied Services**
  
  Regional groups that are policy setting are very effective in providing local representation in an effort to collaborate and cooperate in providing services, but they depend on other structures to deliver the service directly. The Council of Governments in Monroe County, New York is an example.
Hybrid Arrangements to Promote Efficiency and Provide Local Control

Arrangements that combine adequate local representation with an array of service delivery mechanisms applied appropriately to each specific type of service may optimize the benefits of different delivery arrangements. Two-tier governments are a hybrid form. They often combine a regional board, composed of representatives of constituent municipalities, with local delivery for services such as police patrols and regional or county delivery for services like economic development and land use planning.

The literature indicates there is potential in each of these approaches. It is important to fit the mechanism for delivery to the service type. In his review of fifty years of evidence on the relationship between the structure and performance of local governments, Bish (2001) suggests:

… given the diversity of communities and local services, no single organization can perform all the tasks demanded of local government. Metropolitan areas composed of a multiplicity of local governments and production arrangements are more responsive to residents’ needs and generally provide local government services at less cost than monolithic amalgamations.
From the Literature Review and Analysis Related to Measurement of Local Government Efficiency

Performance measurement, and the general attempt to measure efficiency of local government, is an increasingly important concern. Both internationally and with increasing frequency in the United States, local governments are implementing performance measurement systems to improve efficiency and outcomes. Overall, the literature points to promising tools or approaches:

- Performance Indicators (Measures)

  Performance measures should cover the range of the processes being monitored, from workload and inputs to outputs and outcomes, with a consideration for external variables, which may affect performance potential. Outcomes are most important because they measure those conditions that are concerns of the public and help managers, who accept their responsibilities for outcomes, to think outside the box. One also needs to focus on inputs, internal capacities, and outputs. The literature contains many good measures.

- Data Envelopment Analysis

  Analyzing performance data has advanced in recent years. The most powerful tool appears to be Data Envelopment Analysis, which accounts for multiple inputs and outputs and distinguishes between technical, scale, and allocative efficiency. DEA requires sophisticated analytic expertise to use appropriately. However, good management can occur with simple, even basic, forms of data analysis, if it is informed by an understanding of the processes being monitored.

- CitiStat

  CitiStat is an example of a successful data review and performance management system, but only one municipality in New Jersey has implemented it. Since it relies more heavily on management review than on sophisticated analysis or benchmarking, it is hard to replicate throughout an entire state. CitiStat does not preclude sophisticated analysis, but it does not rely on it to achieve its internal management goals.

- Benchmarking (Inter-jurisdictional Comparisons)

  Local governments should make comparisons in order to maximize improvement in the delivery of services. Benchmarking against the performance of other governments is often a popular choice, but there are difficulties in creating comparable cost-based data. When data is available, stakeholders and managers will benchmark.
• Transparency of Performance Data

Managers and local officials debate whether they should publicize all performance data, but the literature considers the benefits of transparency and critical analysis as overshadowing the concerns of those who fear public reaction.
AN INTEGRATED ANALYSIS OF THE CONCLUSIONS

The conclusions of the literature do not support consolidation as an avenue for reducing property taxes. Economies of scale do exist, but according to the literature only for capital-intensive or specialized services that are relatively infrequent at the local level. While economies of scale appear to have potential in general for very small municipalities, this advantage disappears and reverses for labor-intensive services such as police patrols. That is, larger municipalities have reduced efficiencies for labor-intensive tasks.

Although the literature shows that consolidation, or the full merger of municipalities, is not a favored option, other mechanisms for consolidating services are in common use. Consolidation of services does not draw the negative reviews attributed to formal consolidations that result in the dissolution of a municipality. It is worth noting that attempts at formal consolidation, when they are not completed, often lead to other forms of consolidation of services that are more acceptable. Several of the studies of consolidation point to increased sharing of services between governments, transfer of service to a county or regional level, and, on some occasions, to the development of a regional group with constituent representation from the participating municipalities that encouraged cooperation and sharing of services among the members.

What accounts for the acceptance of consolidation of services but not the consolidation of municipalities? Transition costs are greater and the disruption more complex when consolidating whole municipalities. Clearly, the legal and political hurdles of formal consolidation are great. The literature shows that “politics” is a major obstacle. Hence, it advises consideration of costs in terms of what the merged governments realistically can achieve in the face of potential changes caused by harmonizing wages and benefits, increasing uniformity of services, and merging of different facilities and cultures.

An “obvious” conclusion from the consolidation literature is that savings only result if there is a reduction in resources required. Successful reforms must use fewer employees, less equipment, or less costly facilities than were used in total in the pre-reformed governments. Some of the literature demonstrates the increased efficiency in the resulting governmental unit based on clear prior understandings about how they would achieve desired results.

The literature describes alternative arrangements for delivering services, but the comparison of these alternatives is not comprehensive and consistent enough to choose one or another mode of service delivery. Further, there is no common identification of a set of general conditions and factors one should use to point to a better choice in a situation. There is a broad menu of choices but no concrete basis on which to make the decision. The literature frequently states that quality and cost of services must be evaluated in terms of the specifics of the situation.

Direct service delivery by a municipality is the most common form of service delivery. The next most common is shared services, which is the “apple pie” of alternative
arrangements for service delivery. The literature is not clear on why this is such a popular alternative to direct delivery, although it clearly is. In fact, the literature expresses concern that the impact of sharing services is not more carefully measured. There are estimates of the impact of sharing, non-quantified statements of the success of the cooperative arrangements, and even after-the-fact assessments of cost reduction or avoidance, but there is little that provides enough confidence to say how much cost saving can be achieved under any general set of conditions. Possible results must be evaluated for each situation.

Although examples may exist of sharing arrangements that are not beneficial, the literature indicates that, all else being equal, sharing is beneficial in service quality and cost. The literature also states that local governments want to cooperate to a much greater extent. States have developed grant programs and technical assistance mechanisms to encourage cooperation, municipalities have created regional groups to promote shared services, and fiscal stress has led to increased sharing. The common thread in the attempts to increase sharing is to focus attention on it. The literature reports that informal mechanisms are the most common sources of sharing. However, regional groups that are formed largely to find common solutions to local problems have reported considerable success in fostering cooperation.

These regional groups are not, however, that common in New Jersey. The promise of the New Jersey COUNT program, the effectiveness of private-public partnerships and informal county associations, and the effectiveness of a few counties in encouraging municipal cooperation and service consolidations is worthy of attention. The climate of fiscal stress also contributes to elected and appointed officials talking to each other about how to do more with less.

**Evaluating Service Delivery Arrangements for Efficiency**

Cost per capita is by far the most popular metric used. On the other hand, the literature is largely negative about the validity of cost per capita as a measurement of efficiency. The problems with this measure include the inconsistencies of cost allocations and differences in how individual jurisdictions define a service.

These inconsistencies will be present in any analysis of existing models of service delivery in different jurisdictions, and may distort the results. A careful analysis of costs can control some of these inconsistencies.

The review of performance measurement systems demonstrates that the comparability issue remains, but efforts to measure consistently across different jurisdictions can reduce many of the sources of inconsistency. If such a system is in place, comparisons can be made between different delivery arrangements. This would be in addition to the other benefits of a performance measurement system, including the capability to evaluate and monitor the quality of service delivery in an on-going fashion.
In general, the literature review indicates that decisions based on data are possible and more practical when there is a measurement system. Furthermore, that availability of information has led to continual improvements in performance and the development of a culture of rational decision-making.

**The Building Blocks of Service Delivery Optimization**

The literature about alternate arrangements for service delivery can be confusing because of definitions and semantics. Terms like regionalization and consolidation of services are very general. Using more specific terms is helpful in order to understand the options and how local governments can combine them.

“Scale” is a term that appears frequently in the literature. Changes in geographic scope determine scale. The common method of enlarging geographic scope (and, therefore, scale) is to increase the area in which a service is delivered by a single organization. Municipal consolidation, shared services, centralization, or the creation of a special district that serves multiple jurisdictions can achieve greater scale. The logic is that the needs for some resources, such as administrative personnel and equipment, do not grow as quickly as the scale of services being delivered, resulting in increased scale efficiency. The literature is of mixed mind about whether this logic comports with reality.

There is also functional scope, or scope of services. Functional scope refers to how many different services are offered by the same organization. A municipality usually delivers a full complement of services. By having a large scope of services, some general government functions become more efficient than in a single service organization. A single service provider duplicates administrative efforts and, therefore, administrative and overhead costs. A competing view is that this specialization of focus and expertise provides greater efficiency through singular attention to one service. The literature points out, however, that specialization often leads to higher wage costs to pay for the specific expertise in the service area.

The literature also defines service as both service provision and service production. Provision is the responsibility to budget for and make decisions about the amount of service to be delivered, or provided. Production is the actual act of bringing the service to the user or public. Production is a direct act or transaction, which is driven and defined by the budget and other policies of provision. A municipality retains responsibility for provision of a service when it contracts the service production to another government or the private sector. But when a service is centralized to the county, or a special district is formed, the municipality transfers the entire service responsibility.

When the municipality no longer provides for the service, it no longer has control over the service and it no longer needs to budget for such service provision. An implication of not budgeting for the costs is that the municipality no longer needs the source of revenue to support the service. The municipality can reduce or eliminate those fees or taxes (depending on how the service was funded), but those costs will be transferred with the responsibility to the special district or county. Some governments, through the
cooperative creation of regional policy groups or joint boards, counteract the concern about loss of control caused by relinquishing the responsibility for provision. Conversely, policy setting and budgeting may rest solely in the hands of the county or special district, with no input from constituent municipalities.

**Advantages of Different Service Delivery Arrangements**

*Direct Service Delivery*

Direct service delivery is the baseline method of service delivery. It is also the most common method. Its advantages include local control and local response, ability to set appropriate service levels on a uniform basis, the development of local expertise in the service, and the availability of resources (employees, equipment, and facilities) that the municipality can use to provide delivery of other service types during periods of weak demand in the original service type.

The disadvantages of direct service delivery revolve around cost and efficiency. The logic is that scale reduces unit costs; the reality, however, may be different. A smaller organization may attempt to keep costs down based on policy and operational decisions. The implications for quality may or may not be important.

For example, response and availability are essential for crime response and prevention, or any service with unscheduled demand, but not for trash collection and tax assessment, services that the municipality schedules. Resource levels in a small operation may need to be higher to meet peaks in demand (and to counteract unscheduled leave), leading to excess capacity that is not used efficiently in weaker demand cycles. Policy and budget decisions may sacrifice this excess capacity, and therefore response effectiveness, to attain overall efficiency.

On the other hand, service levels in a larger scale operation may be inappropriate for some parts of the area, especially if service levels are made uniform across the entire service area. A larger service area is more likely to lack homogeneity of service demand throughout the area, perhaps related to varying population densities, a rural-suburban-urban mix, or some other factors affecting service needs.

Small communities will use the same personnel resources to provide a range of services. Wearing many hats, the employee of a small jurisdiction providing a service may not be as expert as a specialized employee in a larger entity. Citizens may find their service needs met and may be happier with the transaction simply because a familiar face has provided the service. On the other hand, the larger organization, which contains more expertise, may be better at meeting the uncommon needs of the public and will be more likely to avoid serious errors based on lack of experience with unusual situations (e.g., tax lien calculations and redevelopment financing). The benefits of greater expertise also apply to internal administrative services available to municipal operating departments. Specialized expertise available in a larger government may support internal offices in
being more efficient when that expertise is needed, but the larger administrative department may result in slow, bureaucratic response to routine internal service needs.

Most, but not all, alternative forms of service delivery are intended to provide efficiencies of scale. Although the literature was mixed on this point, efficiencies of scale were seen to apply uniformly only for capital-intensive services, such as infrastructure development and maintenance, or highly specialized services, such as a police crime lab. Most authors believed that diseconomies of scale were in evidence for labor-intensive services such as police patrol. With that background, the next sections review delivery arrangements that take advantage of efficiencies of scale, if they do exist for the specific service type.

Shared Service Delivery

After direct delivery, the next most prevalent service delivery arrangement is shared services, and contracting in general. A shared service is a contract between two or more governments. It is usually contracted for one service at a time, but multiple service type arrangements can be made between the same partners. Typically, one municipality (or other government) acts as the lead agency, directly producing the service for all the partners and supplying the administration necessary to support the service production. Joint production of the service is uncommon, but mutual aid in fire and EMS response is an example where there is no lead agency. Joint production agreements are often more informal.

The provision of the service remains the responsibility of each municipality in which the shared service is delivered. The providing agency must budget for the service as well as make policy about the level of service delivery. Usually the providing agency compensates, through the budget allotment, the producing agency. Policy decisions about the service delivery and service levels made by the providing agency must be consistent with the agreement between the partners. Terminating the agreement is usually straightforward, if policy choices create an inconsistency or performance of the producer is considered inadequate.

The logic is that the service will be delivered over a larger service area, which is comprised of all the municipalities included in the agreement. If economies of scale exist for the service type, all partners should realize efficiency gains. If the scale is great enough, it may be practical to recruit specialized expertise and to acquire specialized equipment to provide the service. An example is the hiring of sophisticated computer experts and the purchase of high-end network servers and communications equipment to provide records storage and retrieval for a consortium of municipalities.

The partner responsible for the service loses control over the actual operation of service delivery, perhaps causing the citizens of this municipality to expect the new service deliverer will not address their needs. In a good shared service relationship, either staff of the municipality responsible for providing the delivery, or a citizen, will contact the delivering partner when there is a service delivery issue (for example, a missed trash
Because all partners are governments, the relationship usually shows sensitivity to public demands.

**Privatized Service Delivery**

In theory, the only difference between a shared service and privatization is that in the latter case the contractor is a for-profit or non-profit organization, not a government. The evidence of the cost savings of privatization in the literature is so mixed that the determination of relative efficiency is not useful on a general level, but can be assessed when entering into a contract. This suggests there are at least three potential comparisons of costs for most services: direct delivery, shared services, and privatized delivery. In general, the advantages and disadvantages of privatization, compared to direct delivery of the service by the municipality, are the same as for a shared service.

However, some differences are more likely to occur with a non-government contractor. The most serious is that the contract is often harder to terminate, even in cases of poor performance. In a related manner, monitoring the contract is more expensive. The contractor may not share the sensitivity to public demands that a government does, but may have more of a business motive for contract performance.

The contractor may have more expertise, in both personnel and equipment, for the service type because it may be an area of business concentration. On the other hand, if the contractor is only providing the service type for the one municipality (more likely with a non-profit contractor), economies of scale will not exist.

**Special District, Non-regionalized, Service Delivery**

A special district, whether regional or based in only one municipality, is formed to provide one, or perhaps two related, service(s). On the surface, it is difficult to make a case for a special district serving a single municipality, unless there are other factors. At a regional level, the numbers might be more attractive.

A special district serving only the residents of the municipality, or only a part of the population, if there are multiple special districts providing the service type within the same municipality, provides no economies of scale. The logic of the advantage of a special district is the concentration of expertise on one service type. A special district duplicates much of the administrative resources and, therefore, administrative costs that are already part of the municipality, which the special district serves.

Compared to the direct provision of service by a department of the municipality, the sole difference in a non-regionalized special district is the formation of a new government, perhaps with authority for taxing, setting rates, and incurring debt. A special district requires the creation of an additional governing body, elected or appointed, for the delivery of the service type. At best, the special district operates at arm’s length from the municipality, and usually the public it serves. The literature is clear that special districts are increasingly under scrutiny and being disbanded, although they are still being created.
in some localities. The literature was silent on the benefits of a non-regional special district.

Compared to a shared service, it is very difficult to terminate this type of delivery arrangement. There must be a legal act to dissolve the special district entity. The assumption of debts and assets is a difficult issue. In addition, a cloud of mismanagement often accompanies the dissolution.

*Regionalized Service Delivery Using a Special District*

Like any regionalized service, there is a potential benefit from economies of scale, where they obtain, in a regionalized special district. Compared to a non-regional special district service, opting out of the regionalized service is easier for an individual municipality, because the dissolution of the special district is not necessary. However, the distribution of debts and assets remains an issue. Otherwise, the discussion above applies, but the difference of scale, when a special district serves several municipalities, is a very significant consideration affecting efficiency results.

*Centralized Service Delivery*

Regionalized service delivery can also be accomplished through centralization. Most centralization occurs at the county level of local government. In the literature review, we differentiated between a shared service and centralized service by determining whether the constituent municipalities had the option to maintain their own service production for the service type being centralized.

In a shared service, the municipality and the county enter into a contract, which either entity can terminate under the conditions of the agreement. The municipality maintains the responsibility for service provision, turning over just the responsibility for service production to the county. It continues to budget for the service and make policy decisions about service levels and delivery, although the county must agree with the amount of compensation it receives and the service it delivers.

In a centralized service, the municipality transfers both provision and production responsibilities to the county. The municipality removes the service from the municipal budget and has no formal control over service delivery. It becomes a county function.

The county service offers economies of scale, if economies exist for this type of service. Because of scale, there is potential for increased expertise. In a centralized service, uniformity of service delivery across the county will usually result. This can lead to service equity (a positive) or inappropriate service levels (a negative), depending on the homogeneity of service needs. Local control is absent, except informally. Responsiveness and quality are dependent on the effectiveness of the operation the county establishes, as the literature shows. The use of local or central delivery of the service does not directly determine the responsiveness and quality of the service.
Hybrid Service Delivery

The arrangements covered above are reasonably comprehensive as a discussion of modes of service delivery. However, the field is evolving as governments seek better methods of service delivery, sometimes developing new forms of government to offset disadvantages arising from an existing service delivery arrangement. Regional policy groups and joint boards are two such forms. They may take other names and have variant implementations throughout the country and abroad, but their essence is a mechanism to re-introduce local control into a service delivery option in which the municipality has relinquished responsibility for both service provision and production.

In their pure form, regional policy groups and joint boards transfer service production responsibilities to other entities, most often counties or regionally operating contractors. The focus of their concern is both policy setting for provision and oversight for production. The basic distinction between a regional policy group and a joint board is the scope of services dealt with. The report on Optimal Service Delivery Arrangements describes the Council of Governments in Monroe County, New York and regional economic development associations as examples of the two forms, respectively. The regional policy group is usually formed when the county or a large city has taken over production for many service types. The joint board is usually formed to determine service policy for one service type. The lines of this distinction are not rigid, and, in fact, variations of the legal authorities vested in such a government and the organization of that government are often crafted to meet a specific perceived need.

Both of these forms attempt to get representation in decisions on provision from the constituent municipalities involved. Although they are governments with governing bodies, they usually do not directly produce services. The literature notes examples of regional policy groups that have been very effective in encouraging innovation and cooperation in restructuring how to deliver services when widespread consolidation of services was seen as necessary.

Hybrid forms of government also include two-tier government structures. Although this is nothing more than a combination of local and regional delivery of services, it appears that the recognition of the need for a two-tier government is accompanied by an increased focus on the best way to deliver each service. From the statements in the literature, this is exactly what will be most effective in maximizing efficiency of government service delivery. Some two-tier governments cited in the literature have:

- Moved services needing a regional perspective (economic development) to a regional level
- Maintained labor-intensive and citizen responsive services at a local level
- Provided a regional council to encourage collaboration and cooperation, identifying optimal methods of service delivery, and providing local oversight of regional services
- Dissolved special districts that were poorly managed, moving the functions to a central or local level, as deemed appropriate
• Consolidated infrastructure intensive services previously delivered by multiple entities into single regional district authorities
• Developed revenue sharing schemes to finance services of regional importance
• Developed central facilities (such as vehicle fueling), taking advantage of bulk purchasing to service individual local departments

Because the literature so often states that specific conditions foster specific service delivery responses, hybrid service delivery arrangements should be encouraged, including the customization of hybrid forms that are suggested by careful evaluation. Hybrids appear to be effective and usually result from an evaluation of specific issues and conditions. They are appealing because they utilize the advantages of an efficient delivery arrangement, while mitigating the disadvantages that are observed or anticipated in the non-hybrid service delivery arrangement.
Local Unit Alignment, Reorganization, and Consolidation Commission

Literature Review and Analysis Related to Optimal Municipal Size and Efficiency

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# TABLE OF CONTENTS

Literature Review and Analysis Related to Optimal Municipal Size and Efficiency

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>1</td>
</tr>
<tr>
<td>PURPOSE OF THE REPORT</td>
<td>5</td>
</tr>
<tr>
<td>REVIEW AND SYNTHESIS OF THE LITERATURE</td>
<td>7</td>
</tr>
<tr>
<td>COMMENTS ON THE LITERATURE</td>
<td>16</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>18</td>
</tr>
<tr>
<td>APPENDIX A – ANNOTATED BIBLIOGRAPHY</td>
<td>20</td>
</tr>
<tr>
<td>APPENDIX B – METHODOLOGY</td>
<td>39</td>
</tr>
<tr>
<td>APPENDIX C – RFP QUESTIONS</td>
<td>43</td>
</tr>
<tr>
<td>APPENDIX D – BIBLIOGRAPHIC DATABASES</td>
<td>44</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus in October of 2008 to conduct a review of the literature and prepare a report on *optimal size and municipal efficiency*. Policymakers generally believe that larger municipalities exhibit greater efficiency.

There is a healthy literature on municipal size and the efficiency of the delivery of municipal services. The belief that larger size governments would be more efficient has motivated much of this work and, further, has motivated the call for consolidation to cure the supposed inefficiencies. The literature provides little support for the size and efficiency relationship, and, therefore, little support for the action of consolidation, except as warranted on a case-by-case basis.

- There is little overall correlation between size and efficiency for municipalities with populations between 25,000 and 250,000.
- The literature does suggest that smaller municipalities (population under 25,000) are less efficient, but details are important.
- Much of the literature argues that small municipalities are not less efficient, except in specialized services.
- Increasing size is related to increased efficiency in capital-intensive services such as utility systems or public works.
- For labor-intensive services, such as police work, an increase in size is related to a decrease in efficiency – smaller units are more efficient than larger units are.
- Larger municipalities with populations over 250,000 are clearly less efficient.
- The literature suggests that cost per capita may not be a good measure of efficiency or performance because of the distorting effect of other factors. Yet, studies use this measure commonly.

Overall, the literature addressed the relationship between size and efficiency that was the basic question of the scope of work. Although the findings are somewhat inconsistent, two main substantive conclusions and one technical point stand out:

- There is an inverted U-shaped relationship between size and efficiency on a general level. Efficiency increases with population size up to about 25,000 people, at which point it is stable until about 250,000 people, and declines with population after that. In essence, the curve states that the smallest and largest municipalities are least efficient.
- The (inverted) U-shaped relationship is not consistent when evaluating specific service types.

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• There are many distorting influences on cost per capita as a measure of efficiency, leading to a serious lack of comparability between jurisdictions.

The literature does not address most of the municipal characteristics enumerated in the scope of work.

Questions from the Scope of Work on Optimal Municipal Size and Efficiency

Purpose of the Literature Review:
Is there an optimal size or range of sizes for a municipal government entity from the standpoint of efficiency and to minimize duplication of efforts? Are there diseconomies of scale associated with larger governments requiring proportionally more administration?

The literature identifies a broad range of population between 25,000 and 250,000 as the most efficient. There are diseconomies of scale beyond 250,000 people. Small municipalities, those under 25,000, are less efficient only when services are specialized or capital intensive.

Evaluate and rank the effect of population density (a pattern of sprawl versus compactness)

The findings in the literature are neither consistent nor strong about the relationship between population density and efficiency.

Evaluate and rank the effect of demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services)

The literature does not generally study population characteristics as determinants of municipal efficiency, but in explaining the weak effects of size on efficiency there was some evidence that wealth is a factor because of increased demands for quality of service. Isolated findings that very old and very young populations show lesser costs per capita and that economically deprived populations show higher costs (in library services) are too infrequent in the literature to be considered significant.

Evaluate and rank the effect of the extent to which important services are regionalized (for example, schools, the existence of regional utilities and emergency service compacts which limit municipal service responsibilities)

The literature on size did not speak broadly to the frequency of regionalization of services, but it did state that capital-intensive services like water provision and
rural road maintenance are sometimes regionalized to achieve economies of scale.

Evaluate and rank the effect of character of land use (bedroom community versus heavily commercial or industrial tax base)

The literature did not generally address these factors.

Evaluate and rank the effect of natural features (limitations on development owing to aquifers, steep slopes, other environmental sensitivities)

The literature did not generally address these factors.

Evaluate and rank the effect of age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe)

The literature did not generally address these factors.

Evaluate and rank the effect of demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub)

The literature did not generally address these factors.

Evaluate and rank the effect of stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth)

The literature did not generally address these factors.

The optimal size of municipal governmental jurisdiction that maximizes cost efficiency in municipal service provision

The overall result -- that municipalities between 25,000 and 250,000 in population are the most efficient -- breaks down when specific services are considered. The literature makes statements about smaller and larger, but is not consistent and specific about the ranges of population for specific tasks or services.

The identification of a range of optimal sizes depending upon municipal characteristics such as any enumerated above

The literature provides very little evidence about the impact of these municipal characteristics.

Whether optimal size varies based on what services are provided at the municipal level/the intergovernmental context

The literature finds that the specifics of the service are very important in the relationship between size and efficiency. Larger (up to a point, which is not specified in the literature) municipalities will deliver specialized and capital-
intensive services more efficiently. Smaller municipalities (as low as 5,000 population is mentioned) deliver labor-intensive services more efficiently.

Other variables which would be helpful for commission members to understand in attempting to identify criteria for consolidation

The most important point is the differentiation by the type of service. The literature even suggests that the details of tasks within a service type are critical. For example, small communities deliver police services more efficiently for routine patrol tasks, but large municipalities perform better in traffic light maintenance and special investigations. Over 80 percent of municipal services are of a routine and labor-intensive nature. Allocative efficiencies (management of resources) are more important than scale efficiencies in these routine service situations.
Purpose of the Report

To meet its overall goals as expressed in the legislation signed into law on March 15, 2007, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) commissioned a literature review to address the question of whether there is an optimal size or range of sizes for a municipal government entity from the standpoint of efficiency and to minimize duplication of efforts. In the RFP it issued, LUARCC made it clear that size relates to the need for consolidation, which the enabling legislation for the establishment of LUARCC also states indirectly:

Consolidating local units, structurally and administratively streamlining county and municipal government, and transferring services to the most appropriate level of government for delivery would help to alleviate the property tax crisis by reducing the administrative costs of local government and making the delivery of local services more efficient due to economies of scale.

The Commission stated the review of the literature on optimal size should take into consideration the diversity of local government and local government conditions in the State of New Jersey. The primary goal was the identification of an optimal size of a municipal government jurisdiction that maximizes cost efficiency in municipal service provision. The Commission asked whether the optimal size varies with the services provided and asked for information on any additional variables useful in the development of criteria for consolidation. LUARCC asked SPAA to seek evidence in the literature of any diseconomies associated with larger governments requiring proportionally more administration.

SPAA searched the literature with these guiding questions as a focus. The research team sought published research on the range of optimal sizes for a municipality in light of population density; physical area; demographics of the population served; land use characteristics; natural features; age of the community and infrastructure; unusual demands on municipal services and the infrastructure; and stress on the property tax base. The annotated bibliography that is included in this report is the result of that research. SPAA synthesized the information in the articles that are listed in the bibliography and arrived at the conclusions presented in this report.

Our review of the literature reveals that the size of local government and the closely related issue of fragmentation are not concerns specific only to New Jersey or to this period in time. New York and Indiana have recently formed commissions to study the same concerns. The 1970 New Jersey County and Municipal Government Commission Report on Joint Services – A Local Response to Area Wide Problems advanced these same issues.

It is not surprising to find no easy answers, no optimal size, and no ideal government structure in the literature, as there are a number of factors that influence the ability to measure the relationship between government size and expenditures reliably. Among
these are the array of services under the responsibility of a local government, the quality of services provided, the willingness of citizens to fund local government services and the wealth of the citizenry. Based on the long-running North Carolina Benchmarking Project, Ammons and Rivenbark (2008) reflect on these sources of inconsistency in comparisons of municipal efficiency:

Because of the inadequacies of efficiency measurement and lack of uniformity in cost accounting rules, most cities and counties wishing to compare their services with other jurisdictions are well advised to focus primarily on measures of effectiveness and quality, where cost accounting and the differentiation of multiple duties are not at issue, and only secondarily on measures of efficiency.

Although there are predominant themes relating size to the efficient delivery of municipal services, there are discrepancies. Our discussion starts with the predominant themes, but it then delves into specific service areas and the underlying factors involved in these specific service areas. It will also discuss types of efficiency and suggest that there are a number of different ways to obtain increases in efficiency.
REVIEW AND SYNTHESIS OF THE LITERATURE

Overall Relationship between Municipal Size and Efficiency

The preponderance of the literature discusses the U-shaped curve between municipal size (as measured by population) and cost per capita to deliver municipal services (see Figure 1). The cost per capita measure is a general indicator of efficiency (rather, the inverse of efficiency, or inefficiency) commonly used in this kind of analysis. In other words, the U-shape suggests that in the smallest governments, one finds the greatest costs or inefficiencies, that there are some gains in efficiency (costs savings) as size increases, but these level off in the middle ranges of size, and for the largest municipalities some inefficiency returns.

However, even this discussion of the (inverted) U-shaped nature of the relationship between size and efficiency has variations. This clear statement is a starting point: “The consensus among researchers who have studied consolidation efforts is that nearly 80 percent of municipal services and activities do not possess economies of scale beyond a population of approximately 20,000 residents.” (Katsuyama, 2003) Gabler uses a threshold of 25,000 (in 1960 population numbers) and is more emphatic about the diseconomies at the large end of the scale: “The results of this present study suggest that large cities tend to employ and spend more per capita than the smaller jurisdictions and that this tendency is attributable – in part – to the effects of city size.” (Gabler, 1971)

The 1987 report of the Advisory Commission on Intergovernmental Relations, “The Organization of Local Public Economies” provides further support for these numbers. The report reviewed the studies of several researchers and concluded that per capita costs generally fall with increasing size for municipalities with populations up to 25,000, remain fairly constant for those up to 250,000, but then rise significantly.

The U-shaped curve seems relatively consistent and generalizable across social and cultural contexts. A study of water supply in rural India (World Bank, 2008a) provides more evidence of the U-shape, but in this case, it is applied to households and in a very different context. “The size classes 500 to 1,000 households and 1,000 to 1,500 households have relatively lower cost, compared to smaller or larger piped water supply schemes.” Post-war amalgamation in Japan also showed the U-shaped function, but with somewhat different levels of population, indicating 115,109 persons was the threshold at which efficiency gains would reverse (Mabuchi, 2001).
Several studies show little or no relationship between size and efficiency. In a study of counties providing local services in Iowa (Koven and Hadwiger, 1992), the authors see no evidence for the ‘bigger is better’ mantra.

The big county is not superior in most respects. Per capita expenditures of the large county exceed those of four of the five smaller counties. Per capita taxes, similarly, are higher in the big county functions but were generally no higher than the per capita expenditures in smaller counties, except for hospitals, highways, and capital outlays. The evidence from the double-sized county indicates that economies of scale leading to lower taxes and spending have not transpired. Factors such as quality of services, organizational slack, and willingness of residents to pay for services must be considered in order to draw more definitive inferences concerning the advantages of plans for structural reorganization. The Iowa data, however, do not support the view that bigger is necessarily more efficient.
This does not necessarily refute the U-shaped curve finding and, in fact, may support it, but the message of the author clearly focused on opposing consolidation. Another quote makes that completely clear: “Consolidation may not produce savings or be politically feasible.” Note that capital outlays are an exception, which is a point that is evident in other references.

Australia enacted many consolidations based on the widespread acceptance among policy makers that larger municipalities would exhibit greater economic efficiencies. Byrnes and Dollery (2002) reviewed the literature to determine if an empirical basis existed for this view. Their conclusion was, “The lack of rigorous evidence of significant economies of scale in municipal service provision casts considerable doubt on using this as the basis for amalgamations.”

An early study from Ontario, Canada finds little support for the relationship between size and efficiency, including even among the smallest municipalities (Bodkin and Conklin, 1971). The study was investigating the proposition of consolidation promoting efficiency and stated “…our calculations suggest that quite small municipalities, even those with populations in the range of 5,000 to 10,000 persons, can provide fire and police protection, sanitation and waste removal, conservation of health, recreation, and general government services as cheaply, or even more cheaply, than can the larger municipalities.”

“Sources of Public Service Improvement” (Boyne, 2003) presents a review of empirical studies of public service performance. It concludes: “Little support is found as to the proposed relationship between organizational size and service performance.” Generally, many factors assumed important had little or no impact on performance. “There is no indication that extra resources (financial & real resources) lead to poorer services, and there is only moderate support for the proposition that it will lead to better services.” On one factor, the author gives a positive thumbs-up: managerial variables have a significant impact on performance. We discuss management further under types of efficiency.

Although the focus of Mera’s article, “On the Urban Agglomeration and Economic Efficiency” (Mera, 1973), is economic development, there is a clear statement from the evidence that relates to government expenditures per capita:

the evidence supported the proposition that wealth or resources (measured in terms of median family income and state aid) is far more important than population size or density in explaining variations in total per capita expenditures among local units...This conclusion is not unique; it confirms earlier studies which tend to show that the expenditure per capita is not very much related to the population size when the expenditure is one way or another adjusted for quality differences.

The study, “Fragmentation and Sprawl: Evidence from Interregional Analysis” (Carruthers and Ulfarrson, 2002), that focused on the relationship between fragmentation
and sprawl, also notes the effect on public expenditures. “Fragmentation is associated with lower densities and higher property values but has no direct effect on public service expenditures.”

**Impact on Specific Service Types**

The literature shows not all service types react to municipal size in the same manner. In fact, some effects are opposite to the general finding of the U-shaped curve, depending on the service rendered to the public. Bish (2001) reviews over fifty years of literature on amalgamation in coming to the conclusion that policymakers need to change their thinking about governance, abandoning the discredited belief in large hierarchical organizations and moving to a research based understanding of the conditions under which local governments can function successfully.

One general distinction in the overall relationship between size and efficiency stands out: capital-intensive versus labor-intensive services. Generally, capital-intensive services, such as water delivery, sewer services, and road maintenance become more efficient or less costly with increasing size. This is fairly intuitive. Not as intuitive is that labor-intensive services not only fail to benefit from increasing size of a municipality, but also may actually show diseconomies of scale. Jake Haulk, President of the Allegheny Institute for Public Policy in Pittsburgh, says research shows that towns are most efficient in delivering services such as police, fire protection and roads at a population of about 15,000 (Cauchon, 2006). The small towns often fill needs specific to the tiny areas they serve. Police services are the most studied example of such labor-intensive services.

An enduring article from half a century ago summarizes these effects succinctly: “…water and sewage services, which often account for about 8-10 per cent of total expenditures, tend to be rendered in a vertically integrated plant. Growth and consolidation will lead to a decline in per capita expenditures until a very large scale is reached, so large that few city and metropolitan areas have achieved it.” On the other hand, “Public education, fire protection, police protection, refuse collection, etc., accounting for around 80-85 per cent of all expenditures, will be furnished in horizontally integrated service plants. Growth and consolidation appear to have little, if any, significant effect on per capita expenditures for these services.” (Hirsch, 1959) The author also includes general administrative services, but there is a more complex relationship for this service type. “The central administration of municipal or special district governments, accounting for 3 - 6 per cent of total local government expenditures in metropolitan areas, is performed mainly in a circularly integrated plant. In the early growth stage, per capita expenditures for these services will tend to decline. Beyond a point found in medium-sized communities, growth or consolidation will tend to produce per capita expenditure increases.” Administrative services appear similar to other labor-intensive services, but show efficiency gains at the low end of municipal size, reversing that trend at the higher end, much like other labor-intensive services.

A different conceptualization produces the same conclusion. Services that require capital investments are easy to measure, are needed only rarely, possess economies of scale in
relation to the population served, and may be produced most efficiently for large populations. Conversely, services that are labor-intensive are difficult to measure, are performed frequently and regularly, and are likely to possess diseconomies of scale (Bish, 2001). The author also observes most researchers conclude that approximately 80 percent of local government activities do not show economies of scale beyond populations of 10,000 to 20,000. The remaining 20 percent are for specialized services needed infrequently by small municipalities.

Other studies mirror the results for water services (Fox and Gurley, 2006; Tynan and Kingdom, 2005; World Bank, 2008a; Bodkin and Conklin, 1971). It is not surprising that water services are often delivered as a contractual service with either a private or public provider or are provided through a regional authority. These mechanisms are better at amassing the required capital for infrastructure development and enhancement. Tynan and Kingdom note further, however, that a desire for increased customer responsiveness has been pushing the transfer of services to the municipality, which will result in cost increases.

Public works services can incur high capital costs for equipment, but unlike water and sewer systems, these are not at the level of infrastructure development. Some authors have investigated road maintenance in rural New England and found it behaves like water and sewer services rather than like police services (Deller, et al, 1992, Deller and Halstead, 1994). The authors conclude: “small town governments may best match local demand with services, but at high cost”. The first, but not the only factor, is the scale efficiency obtained with increasing size. “The data strongly support the notion of economies of size in the production of rural road services.” One option would be to consolidate this service, but efficiencies are also possible through joint or cooperative purchasing.

The second factor the authors point to is not scale efficiency, but allocative efficiency (management use of resources). Small towns do not use resources efficiently. Deller and Halstead seem to link the bulk of the 40 percent higher-than-necessary costs with the inefficient use of inputs. In sum, the authors boldly state: “… the current institutional arrangement of placing rural road maintenance responsibilities in the hands of town officials is highly inefficient in terms of both size economies and managerial efficiency” and then back off with: “These results, however, should not necessarily be used to promote reforming smaller units of government into larger, more economically efficient units.”

When we turn our attention to police services, the initial research is strongly in favor of small departments. These results are in part because of perceptions of safety and responsiveness, but they are also directly related to efficiency and cost containment. There is also a reaction in the literature to what one author terms “the anti-consolidationists.”

Their (Elinor Ostrom et al) work consistently demonstrates that smaller units tend to be more responsive providers of police services. …No study
has found a large police department (over 350 officers) able to perform more effectively in delivering direct services to citizens in similar neighborhoods than smaller departments. Frequently small departments deliver better service at lower cost. (Advisory Commission on Intergovernmental Relations, 1987)

This report showed similar results for small town efficiencies in other service areas, such as education.

Allocative efficiency (management of resources) is more effective in small departments, but it is slightly offset by the U-shaped curve of scale efficiency (size economies) in the middle range of department size (Drake and Simper, 2000). Drake and Simper assert the reasons for the better management efficiencies are that “effective resource usage and cost control are easier to accomplish in smaller police forces than in larger ones.” Scale efficiency leads to the results that predominate in the literature. First, there is a diseconomy of scale in the largest departments – efficiency declines with increasing size. But at moderate levels of size, larger size units show greater efficiency. These gains in efficiency within the moderate size departments are modest.

Ostrom and Whitaker’s work in the ‘70’s refutes the theory that size will beget efficiency in policing. Although there is some evidence that there are gains at the lower end of the size spectrum, because of less responsive performance at medium sizes and above, the evidence supports the provision of services by smaller departments. The initial study (Ostrom and Whitaker, 1973) compared three independent communities adjacent to Indianapolis with three matched neighborhoods within the city. The citizens in the independent communities were victimized less, received assistance more, the assistance came more rapidly, and the residents rated the police-citizen relationships as good in a higher percentage (94% versus 82% of residents). The police departments in the independent communities achieved a higher level of output. The authors’ conclusion was, “Our findings strongly suggest that in the area studied, small police forces under local community control are more effective than a large, city-wide-controlled police department in meeting citizen demands for police protection.”

Three years later Ostrom looked at a series of empirical studies (Ostrom, 1976). “In general, examining the full set of respondents, we found consistent but weak relationships between size of jurisdiction and general evaluations of police services. All significant relationships run counter to those predicted in the simplified consolidation model. Feelings of safety decrease with size; fear of break-in and attack increase with size; and the rating of police honesty decreases with size. In regard to the cost of police services, we found a positive relationship between city size and per capita costs.” The author concludes that small departments are better performing than large: “…very small- to medium-sized police departments consistently perform more effectively and frequently at less cost than do large police departments.”
Pachon and Lovrich disagree and re-analyzed the data on public perceptions of police in 15 cities (Pachon and Lovrich, 1977). They assert that the effects Ostrom saw were due to the socioeconomic characteristics of the respondents:

... [T]here appears to be very little evidence of a negative relationship between jurisdictional size and citizen satisfaction when controlling for socioeconomic characteristics. Quite to the contrary, the overwhelming trend is in the opposite direction: in five of the six partial correlations calculated there is weakly positive relationship between city size and citizen satisfaction! The strength of this positive relationship is particularly evident in the small suburbs category.

The authors also refute Ostrom’s statement that large police departments are not more efficient or economical. However, they produce no additional data or analysis, simply stating that the evidence is still inconclusive.

A study of English libraries is one of the few instances in which the population served was considered in assessing the relationship between municipal size and efficiency (Stevens, 2005). Although no direct effect of population density on expenditures was in evidence, an indirect one exists. Costs are lower either where a large young population (under 16) or a large senior population (over 65) exists. Costs are higher in areas serving a large economically deprived population. Although not as detailed in evaluating other factors, another study of libraries in the bottom half of the globe (New South Wales, Australia) found that efficiency can be achieved for population levels between twenty and thirty thousand persons (Worthington, 1999)

Considering the different relationships between size and efficiency for different service types, it is difficult to conclude that one size government is optimal in all circumstances. Bish (2001) takes this statement further by observing that even in a service category, there can be both functions that small governments deliver more efficiently and functions that large governments deliver more efficiently. For example, police services include both routine patrol (favoring small) and specialized homicide investigations (favoring large). The conclusion is that no single size of organization is suitable for all services, even within a service type.

**Some Additional Detailed Findings**

The details in the work of Gabler; Revelli and Tovmo; Katsuyama; and Boyne provide evidence of how difficult it can be to identify effects that are consistent. We present them here, in part for completeness, but also to demonstrate the inconsistencies in the results in the literature.

Gabler studied efficiency in three states: Texas, Ohio, and New Jersey (Gabler, 1969). Many results are not consistent in all three states. When he looked at the medium size municipalities (25,000 to 250,000 population), the only systematic relationship between size and per capita expenditures was for fire protection in Texas, in which size led to
higher per capita cost. Size and public employment rose together for parks and recreation in Texas and Ohio, and for administration, police, and fire in Texas. No other relationships are significant in the three states and service areas studied. Given these mixed results for medium-sized populations, Gabler concludes that no major economies or diseconomies of scale exist.

Among the larger cities (over 250,000 population), Ohio shows greater police expenditures with increasing size, but this is not related to greater manpower needs. Texas shows no relationship between size and costs or employment other than a slight tendency for expenditures for administration to increase with size. In New Jersey, diseconomies of scale exist in total expenditures per capita, total employment, administrative employment, expenditures for sanitation, employment for sanitation, expenditures for police, and expenditures for fire. No other relationships are evident other than an economy of scale for highway expenditures and employment. (Table 1 compares expenditure data in New Jersey’s two largest cities with 34 smaller cities.)

**Table 1 – Per Capita Expenditures per 100 Population for Selected Functions by City Size in New Jersey**

<table>
<thead>
<tr>
<th>City Size 1960 Population</th>
<th>Total</th>
<th>Highways</th>
<th>Police</th>
<th>Fire</th>
<th>Sanitation and Sewerage</th>
<th>Parks and Rec.</th>
<th>General Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>34 Cities (25,000 – 250,000)</td>
<td>139.93</td>
<td>6.11</td>
<td>15.87</td>
<td>13.38</td>
<td>11.43</td>
<td>5.46</td>
<td>3.21</td>
</tr>
<tr>
<td>Jersey City (276,101)</td>
<td>192.39</td>
<td>4.29</td>
<td>24.47</td>
<td>18.34</td>
<td>9.68</td>
<td>6.21</td>
<td>4.15</td>
</tr>
<tr>
<td>Newark (405,220)</td>
<td>211.50</td>
<td>4.06</td>
<td>30.02</td>
<td>20.52</td>
<td>14.02</td>
<td>3.90</td>
<td>2.96</td>
</tr>
</tbody>
</table>

Reformatted from “Economies and Diseconomies of Scale in Urban Public Service” (Gabler, 1969). Expenditure data are from 1962 and are divided by the 1960 census figures of population.

Gabler’s study also looked at the effect of population density on expenditures per capita and employment per capita. The findings are less significant and uniform than those for population size. There are not clear-cut findings for service areas that apply across all three states, although his general finding that larger cities experience diseconomies of scale is supported more often than it is not. His later study (Gabler, 1971) confirms these mixed results, but also shows that the largest cities do experience diseconomies of scale.

A study from Norway that looked at both population size and population density adds to the lack of consistency associating these factors with efficiency (Revelli and Tovmo, 2007). These authors found a negative relationship between size and efficiency (larger governments were less efficient) and a positive relationship between the sparseness of the population and efficiency. Rural areas attained higher levels of efficiency.
The general finding of Katsuyama’s review of studies of consolidation was that there was a population threshold of 20,000, beyond which economies of scale do not persist (Katsuyama, 2003). However, for the 20 percent of municipal services that are highly specialized, used infrequently, or require large capital investments, the results are different. Spreading large capital costs over a larger population will reduce the cost per capita. Katsuyama agrees with others that, on the other hand, labor-intensive services show diseconomies of scale with increasing size for populations in excess of the population threshold at 20,000. Under that threshold, some studies indicate there may be economies of scale from consolidation, either with a larger municipality or between two smaller municipalities.

New Public Management (NPM) theorists believe that disaggregating large municipalities into smaller units enhances performance. The NPM perspective is not focused entirely on cost efficiency. The belief is that large organizations are bureaucratic, inefficient and lack the managerial flexibility to meet their goals. Boyne analyzed data on six service areas to evaluate this anti-consolidation position (Boyne, 1996). The study uses five dimensions of performance (service coverage, quality, speed, efficiency, and administrative effectiveness) with measures of scale based on workload and output, not population. Since there is no direct relationship to municipal size in the tested hypothesis, the application of the findings is difficult. Boyne states that only in half of the cases, the smallest units were the best performers and, when performance declined with scale, the very largest units showed a reversal of the trend. The author states further that the negative relationship between scale and performance reverses at a very large scale. This result is present in social services, waste recycling, planning, and housing.
COMMENTS ON THE LITERATURE

The main dependent variable in this analysis, expenditure per capita, is a difficult one to measure. Ammons, who serves on the National Performance Management Advisory Board, a joint effort of eleven leading public interest associations to develop a comprehensive, conceptual framework for public sector performance management, expresses serious concerns about the complexity of measuring efficiency across jurisdictions. He is also one of the highly regarded faculty at University of North Carolina’s Institute of Government, where they have conducted the practice of comparative performance measurement and benchmarking for at least a decade. He and his colleagues have grappled with cross-jurisdictional comparisons in North Carolina.

Expenditure data is inconsistent. In the face of these complexities, too many local governments resort to reporting “FTEs per 1,000 population” or “cost per capita” for services overall or for the services of a particular department. These are extremely crude measures of efficiency, if they can be called efficiency measures at all. (Ammons and Rivenbark, 2008)

Burkholder, who, as the principal of Summit Collaboratives, LLC, has been gathering and reporting data in a small consortium of municipalities in New Jersey, provided testimony before LUARCC about many causes of comparative inconsistency, such as:

- Additional services that were provided under identical department names
- Similar services that are categorized under different department names in different towns
- Loaning of personnel during peak needs in other departments, with no concomitant budgetary accounting
- Personnel that routinely provide services in multiple departments without appropriate division of labor expenses

Factors such as these affect both the overall expenditures of a municipality and its division into department budget lines. This is even more problematic in a line item than in a program-based budget. There is no evidence in the academic literature of a detailed analysis of the array or depth of services included in accounting or departmental categories. And there is no evidence that the studies SPAA has found controlled for these difficult inconsistencies. That being said, this affects the precision and use of the results, rather than the overall findings.

If the relationship between size and efficiency is confounded by varying levels of service provided by different governments, one might expect to see differences in public satisfaction with the services delivered. Academics do study citizen satisfaction, but they often find there is little or no evidence that service productivity actually enhances such satisfaction (Moore et al, 2005). Anyone who has lived or worked in a small town knows the expectations of service are less. Although this does not mean that a citizen is willing to wait 23 minutes rather than six for an EMS response, it does mean he/she may be
accustomed to the tax assessor not being available or the construction code official having part-time hours. The literature indeed suggests that citizen expectations do play a role in citizen satisfaction ratings (Van Ryzin 2004, 2006). But it is not clear how different expectations, if they exist, should be dealt with systematically across the diversity of a large state such as New Jersey.

Although a few of the references SPAA found in its search did address demographic factors in looking at the relationship between size and efficiency, most studies do not take demographic or other external factors into account. The distinctions studied are for internal variables, such as service type or forms of efficiency. This is an important limitation in the literature.

Ideology plays a role in the literature. The New Public Managers, who favor disaggregation of large municipalities, face off against the Consolidationists. Pachon and Ostrom argue about the relationship between size and citizen satisfaction with policing. We have tried our best to present these opposing findings and suggest where the interpretations may outstrip the data.
CONCLUSIONS

Although the literature does not reveal strong and consistent relationships between size and efficiency in the delivery of local government services, some relationships are evident. The first relationship describes the overall effect of size of government on efficiency. The second and third statements show that the general relationship does not hold when specific services are considered. The fourth point, about the difficulties of measuring efficiency, is very important in the determination of what promotes municipal efficiency:

- **The Inverted U-shaped Curve**

There is an inverted U-shaped relationship between size and efficiency on a general level. Efficiency increases with population size up to about 25,000 people, at which point it is stable until size is about 250,000 people, and efficiency declines with increasing population size after that. The inverted U-shaped curve that describes the relationship between municipal size and efficiency offers two opportunities for improvement: the very smallest and the very largest governments. The literature defines the smallest as populations less than 20,000 to 25,000. The largest are municipalities with populations in excess of 250,000, which is a limited pool in New Jersey. However, in the one reference from the literature search that specifically studied New Jersey (Gabler, 1969), the diseconomy at the largest end of the spectrum was more uniformly pronounced than in two other states to which it was compared. The literature suggests New Jersey should examine its largest governments as well as its smallest governments for ways to increase efficiencies.

- **Service Specific Relationships**

The most important finding other than the inverted U-shaped curve was the difference in the relationship between size and efficiency in capital based services as opposed to labor-intensive services. Efficiency gains are related to size for capital or infrastructure intensive services such as sewer and water. The literature supports the finding that this same concept is operative for seldom used and specialized services, such as a high technology crime lab. This suggests that contracting, sharing, or receiving specialized services from a larger entity can make selected services more efficient.

- **Labor-Intensive Services**

Labor-intensive services are more efficient in smaller governments. The literature only offers burdens of management control and excess administration in larger governments as an explanation for such inefficiencies. Reduced levels of services and expectations in smaller towns may also be operating to reduce costs. This finding of increased efficiency in smaller units
is an important conclusion, because the literature attributes over 80 percent of governmental cost to labor-intensive services including police, fire, and education.

- Complexity of Measuring Efficiency

An additional finding from the literature is the difficulty in determining one measure of efficiency that works well at the level of a municipality or even for a service area. The most common basis for a measurement of efficiency is expenditure data, which is the numerator in the cost per capita indicator used throughout the literature. Varying definitions of expenditure measures across jurisdictions are the culprit in the comparability of this indicator. LUARCC has begun to evaluate the possibility of using municipal expenditure data in New Jersey to examine efficiency and the factors that promote it. While a difficult task, this makes a great deal of sense, because of the ability to attempt to control some of the confounding influences.

Finally, we must recognize that there are many inconsistencies in the literature. Even the most consistent findings of the inverted U-shaped curve and the relationship for capital-intensive versus labor-intensive services have variations supported by some authors. For example, we could not reconcile the debate over police responsiveness and inefficiency in small versus large units. Different authors observed greater managerial efficiencies in small units, but others saw relative efficiencies in large units. The literature does not provide a high level of confidence for further action on a systematic and broad basis.
APPENDIX A -- ANNOTATED BIBLIOGRAPHY

Literature Review and Analysis Related to Optimal Municipal Size and Efficiency

This commission report reviews the optimal structure of local government. The report declares that a multiplicity of general and special purpose governments contributes to democratic values and a coherent local public economy. The report distinguishes between the provision (that is, the determination of what) and the production (that is, the determination of how) of public goods and services.

Many local governments measure and report their performance, but the record of these governments in actually using performance measures to improve services is more modest. The authors of this study examine patterns of performance measurement use among a set of North Carolina cities and conclude that the types of measures on which officials rely, the willingness of officials to embrace comparison, and the degree to which measures are incorporated into key management systems distinguish cities that are more likely to use performance measures for service improvement from those less likely to do so.

The twenty-first century will be one of rapid change and great need for institutional adaptability. Yet, in the critical area of the relationships among citizens, the civil community, and local governance, some provincial governments are imposing an intellectual fashion of the nineteenth century in the form of an almost religious faith in monolithic organizations and central control. This Commentary undertakes a comprehensive review of 50 years of evidence on the relationship between the structure and performance of local governments in metropolitan areas.

This article summarizes a study of the determinants of municipal government expenditures, which was undertaken for the Government of Ontario. It examines the abilities of large and small municipalities to deliver specific types of services efficiently.

In a recent article Koichi Mera addressed himself to the question of the economic efficiency of urban agglomeration. Specifically, he claims to have demonstrated that "in terms of economic efficiency, even the largest metropolitan area in the world is likely to less than the 'optimal' size." The purpose of this article is to dispute this claim. The original article and this comment are focused on the effect of size on overall economic productivity, not local government expenditure, but Borukhov does reference studies on the expenditure of local government.


The debate in the UK on the reform of local government structure is poorly informed by empirical evidence. This article bridges part of the empirical gap by drawing upon analyses of structural effects in the USA. Two main dimensions of structure are outlined: fragmentation and concentration, both of which can vary vertically and horizontally. Fourteen structural hypotheses are identified and categorized as technical, competitive and political effects.


New public management (NPM) arguments on strategy and structure suggest that performance is enhanced if large organizations are disaggregated into smaller units. The NPM perspective reflects the views of public choice theorists who claim that big organizations are unresponsive to public needs, inefficient and fail to achieve their formal goals. These arguments have underpinned many recent changes in the structure of public services at both central and local levels. This paper uses data on six local government services to test the NPM hypothesis that there is a negative relationship between scale and performance. Five dimensions of performance are analyzed: service coverage, quality, speed of provision, efficiency, and administrative effectiveness. Scale is measured through indicators of service output, caseload and needs. The impact of scale is tested in multivariate statistical models which control for other potential influences on variations in performance across local authorities.


Evidence from sixty-five empirical studies of the determinants of public service performance is critically reviewed. The statistical results are grouped on the basis of five theoretical perspectives: resources,
regulation, markets, organization, and management. The analysis suggests that the most likely sources of service improvement are extra resources and better management. A research agenda for further work is identified, and recommendations are made to enhance the theoretical and methodological qualities of studies of public service improvement.


The 1990s witnessed a major era of structural reform in Australian local government. Amalgamation programmes in all six states resulted in a substantial decrease in the number of local authorities in Australia. The chief rationale underlying local government mergers lay apparently in the belief that larger municipalities would exhibit greater economic efficiencies. Despite its widespread acceptance amongst policy elites, this argument did not derive from a solid empirical base. This article seeks to evaluate available research evidence on the controversial question of economies of scale in Australian local government.


The aim of the paper is to present a critical view of theoretical works on city size. Note that the dependent variable is not the efficiency of government, but efficiency of the city, as a whole. It begins with the consideration that, during the 1960s and 1970s, the question of optimal city size tended to be expressed in a misleading way. The real issue is not 'optimal city size' but 'efficient size', which depends on the functional characteristics of the city and on the spatial organization within the urban system. Economies of scale exist up to a certain city size. However, urban development generates conditions leading to structural readjustments which may create new economic advantages. These structural adjustments may either be sectoral transformations towards higher-order functions, or increases in external linkages with other cities. The paper provides empirical evidence of these processes, and contains an econometric evaluation of urban location benefits and cost functions with respect to different levels of network integration, size and urban function. The model is applied to 58 Italian cities.


The authors present a model for estimating the cost of providing local government services, and then introduce the notion of the "optimal" size of a municipality. In this paper, they present an analytic framework for the geographic aggregation of municipalities into larger and more populous
municipal districts in order to reduce the costs of providing public services. The model allows the authors to determine the optimal number of districts for a fixed population size in a given geographic area, and to arrive at the extent of cost savings possible in the absence of additional considerations.


Recent years have witnessed widespread expansion of state and regional planning programs in the United States. A major purpose of these efforts is to reduce urban sprawl, -- low density, discontinuous, suburban-style development, often characterized as the result of rapid, unplanned, and/or uncoordinated growth -- by promoting jurisdictional cooperation and regulatory consistency across metropolitan areas. This paper evaluates the efficacy of this approach by examining the relationship between governmental fragmentation and several measureable outcomes of urban development: density, urbanized land area, property value, and public expenditures on infrastructure. The four dimensions are modeled in a simultaneous equations framework, providing substantive evidence on how fragmentation and other exogenous factors affect metropolitan growth patterns.


This newspaper article coincided with the beginning of the New Jersey special legislative session on property taxes. The article presented the perspectives of the governor, legislators, local officials and the public, as reflected in a Gannett poll. The USA Today article analyzed New Jersey local government to be only slightly more costly than that of the average state.


The deterioration of the supply of public infrastructure throughout the United States has been found to be accelerating. The reason most often cited for the increasing rates of deterioration is the lack of available funding, or fiscal stress, present in many local governments. A popular short-term solution to fiscal stress is to defer infrastructure repairs and/or replacement programs. This is particularly true in rural areas where a declining agricultural base and redirected federal policy have placed significant downward pressure on revenues. The search for a long-term solution has renewed the debate about the optimal size of local governments. The research reported here examines the issue of size efficiency in the production of low-volume rural roads in the Midwest. At
issue is the ability of Midwest townships to realize size economies. Overall, size inefficiencies were identified, which suggests that cost savings may be realized from the reorganization of the production of low-volume road services.


The cost of producing the same good often differs substantially for public and private producers. The study investigates the effect of organization in a case where the production technology is simple: The cleaning of Danish schools. Three forms of organization are used: decentralized municipal, central municipal or private.


This 1970 report was referenced in the LUARCC project reports to provide evidence of the on-going nature of the interest in shared services and the efficiency of local government


The research reported here examines the ability of a sample of Midwest township officials to produce low-volume rural road services in an economically efficient manner. Farrell-type measures of input use and scale efficiency are reported. Results suggest that over 50% of costs may be unnecessarily incurred because of input use inefficiency. Correlation between output measures and the efficiency measures suggests that larger jurisdictions are more efficient than smaller jurisdictions. In addition, 84.5% of the townships exhibit technology characterized by increasing returns to scale. These results suggest that jurisdictional consolidation of production-related responsibilities may yield substantial cost savings.


Structural limitation and narrow managerial capacity have consistently hampered both an effective and efficient decision-making process in small rural governments. Due to small size and relative isolation, rural governments are inherently limited in developing either effective policy or efficient delivery systems. These structural barriers have prevented many rural public officials from developing the capacity, resources, and expertise needed for managing increasingly complex problems. This article provides a brief review of the performance measurement literature and suggests an alternative approach to assessing the efficiency of producing local public services. The proposed method seeks to
incorporate microeconomic theory into the measurement process. The case of producing low-volume rural road services in the Midwest is examined to illustrate the method. The data used to study managerial efficiency in the production of rural road services were gathered from a mail survey of Illinois, Minnesota and Wisconsin township road officials and the 1982 Census of government. The sample contains 435 independent observations of Midwestern townships.


An analysis of size and managerial efficiency of northern New England towns in the production of rural road services is reported. A stochastic cost frontier was used as the normative efficiency reference set. Empirical results provide evidence of economies of size in the production of road service in New England and evidence that size inefficiencies are present. Results also suggest that managerial inefficiencies, or input use inefficiencies, are present and costs may be 40 percent higher than necessary. At issue is the effectiveness of current institutional arrangements: small town governments may best match local demand with services, but at high cost.


This report of the Australian government examines various structural reforms. Typically, economic approaches to local government performance improvements take one of two forms. In the 'conventional' view, large, hierarchical, multipurpose organizations are seen as the best way to organize local public services. This approach argues that in a 'consolidated' structure, all services are provided by a single unit that covers a wide geographical area. Economic arguments usually advanced in support of this view include economies of scale, economies of scope, administration and compliance costs (Dollery & Crase 2004). The 'public choice' perspective that has gained prominence in the last 40 years provides a sharply contrasting view. Proponents argue that efficiency and responsiveness are enhanced by local government structures that are based on markets and competition rather than on structural and administrative consolidation.
On 17 April 2007 the Queensland government established a Reform Commission to consider the compulsory amalgamation of local councils. On 27 July 2007 the Commission recommended a program of compulsory amalgamation that would reduce the number of local councils from 157 to 73. These recommendations were passed into law amidst great acrimony in the early hours of 10 August. This paper provides a critical evaluation of the arguments for amalgamation presented by the Commission in the light of the scholarly literature on local government mergers.


This article utilizes data envelopment analysis (DEA) to estimate the productivity of the English and Welsh police forces and to determine whether there are categorical scale effects in policing using multiple discriminant analysis (MDA). The article demonstrates that by using DEA efficiency results it is possible to make inferences about the optimal size and structure of the English and Welsh police forces.


This study uses both parametric and nonparametric techniques to analyze scale economies and relative efficiency levels in policing in England and Wales. Both techniques suggest the presence of significant scale effects in policing and considerable divergence in relative efficiency levels across police forces.


This paper analyzes returns to scale in public production. Existing studies fail to differentiate among three dimensions of scale: service quality, the level of governmental activity, and the number of people served. A fourth dimension, economies of scope, is need for agencies that provide multiple services. This paper provides a formal definition of returns to scale for each dimension. This framework is applied to fire protection, using a translog cost function with two services, fire prevention and fire suppression. The results indicate economies of scope, increasing returns to quality scale, and constant returns to population scale.

This article presents the results of a detailed study of potential cost savings from consolidation of New York school districts. It extends past research on consolidation by developing a theoretical framework which distinguishes several dimensions of economies of scale and defines an empirical cost function for schooling. While findings apply directly to New York, the method developed here has general relevance to state education policy by helping to target candidate school districts for consolidation, and, where consolidation is not feasible, adjusting state aid formulae to reflect more accurately the cost impacts of scale.


Local government size varies dramatically around the world. In Sudan, Côte d'Ivoire and the United Kingdom municipalities average more than 125,000 people. Those in many European countries have less than 10,000 people. Countries often consider consolidation of local governments as a means to lower service delivery costs, improve service quality, enhance accountability, improve equity or expand participation in government. The paper reviews a number of theoretical arguments and empirical findings concerning the size of sub-national governments. Countries should not presume that amalgamation will solve the problems because benefits and costs are situation specific. Success depends on many factors including getting incentives right for the various players and managing the transition properly. The effects on costs must be examined in terms of all changes occurring with consolidation, including geographic size.


Previous studies have yielded somewhat different conclusions as to the effect of population size on city per capita expenditures. The analysis in this article was motivated not only by the differing conclusions, but also by the increased concern expressed by policy-makers with the effects of population growth and redistribution on urban areas in general and cities in particular. This article attempts to assess the effects of three population factors -- size, density, and rate of change -- on the provision of certain public services.


The influence of various population factors on the level of per capita expenditures has attracted increased attention in the recent past, both in the professional journals and among policy-makers at all government
levels. Differences in city expenditures per capita have been linked with variations in such factors as city size, rate of population growth, and population density. Yet, earlier studies, using different units of observation and analytical approaches, have, not surprisingly, reached different conclusions. The purpose of this article is to utilize the now available 1967 Census data and to expand an earlier inquiry to encompass eight -- as opposed to three -- states.

In this study, the authors established a procedure for evaluating the efficiency of providing the water supply. This procedure has allowed the authors to find that the proposed indicators have a discriminating capability in the analysis of the service, and to reject criticisms traditionally assigned to the sensitivity of the data envelopment analysis (DEA) technique in relation to degrees of freedom. The article studies efficiency but is also illustrative of the use of the technique of Data Envelopment Analysis.

In the economic analysis of the theory of government, two views of government are evident. The Pigovian view sees government as a benevolent actor striving to correct for the inadequacies and excesses of an unrestrained marketplace. The Public Choice' view of government portrays government as the tool of special interest groups as likely to generate distortions as to correct them. In this paper, a model of government that incorporates both views will be developed and then empirically tested. The model developed assumes that all expenditures by the government are inputs into the private sector production. Treating government expenditures as inputs into the production of private sector output, there is some optimal size of government that maximizes private sector output. The model incorporates a general production function for private sector output. Output is a function of private labor, private capital, and government expenditures. The Pigovian and Public Choice views of government are reflected in the assumed impact of G on the marginal productivities of L and K. The model is tested using United States data and a Cobb-Douglas production function.

This paper estimates scale economies in police production, using data from municipal police departments in the state of Florida. A multiproduct translog cost function is estimated using cross section data from Florida's
municipal police departments. It estimates a multi-product translog cost function and applies duality theorems to derive economies of scale of the underlying production function. The paper also tests for the existence of economies of scope. It is by estimating scale economies from different data sets under different conditions that the extent of scale economies in police production in general can be inferred. A different data set with more observations aids efficient estimation. The analysis disaggregates labor into sworn (police) and non-sworn (civilian) personnel and includes a capital input.


Two extensive municipal reforms have substantially reduced the number of municipalities in Sweden. The main objective of the first municipal reform in 1952 was to form municipalities with no less than 2,000 inhabitants in order to increase administration efficiency and to exploit economies of scale in the provision of local public services. This paper studies whether the growth in local public expenditures differed between the newly formed municipalities and the ones that were not affected by the reform. The empirical analysis is based on data for the years 1951, 1953 and 1959.


Metropolitan areas are growing fast and so are their problems. To make this growth smoother and fiscal problems less burdensome, the consolidation of metropolitan area governments is widely advocated on the premise that it will reduce per capita expenditures of local government services. It is argued that, just as there are economies of scale in manufacturing, average municipal costs and expenditures likewise decline as the size of the local government unit increases. This paper will attempt to develop a theoretical framework for analyzing the question "What are the likely expenditure effects of metropolitan growth and consolidation?" The deductive answers will then be tested by an empirical analysis of 149 government units in the St. Louis metropolitan area and some Massachusetts cities.


Data from 487 municipal governments with populations greater than 50,000, as reflected in Historical Finance Database from the 2000 U.S. Census, are examined to see the relationship between population density and per capita government expenditures. It uses aggregate data on expenditures and is therefore subject to the same concerns plaguing most studies. This study examines the proposition that sprawling development increases government costs relative to more compact urban development.
by looking at the impact of population density on the cost of providing
government services. The relationship between per capita total
expenditures and population density has policy relevance because it
indicates that when all government expenditures are taken into account,
policies that increase population density will not reduce per capita
government expenditures and, in larger cities, will lead to higher per capita
government expenditures.

November 10, 2008, from
This article reviews the literature on size and evaluates the effectiveness
of consolidations. The article begins by stating that fragmentation is
usually assumed to be inefficient, but remarks that there is a growing body
of evidence indicating that this conventional wisdom may not always be
true. It compares the arguments for and against consolidation and
reviews some of the research and case studies. The article suggests
alternatives to consolidation that may provide alternative paths to
efficiency.

Delivery," Public Productivity & Management Review 15(3 (Spring)): 315-328.
The efficiency of rural counties in Iowa varying in size is evaluated and
potential structural changes are reviewed with those findings considered.
In particular, the decline of both population and revenue in counties in
rural Iowa is seen as pushing the need for a structural change such as
consolidation. The article also discusses obstacles to consolidation that
are associated with a rural environment.

Long Island Index (2007). "A Case Study Comparing Governance, Taxes and
Local Services on Long Island and in Northern Virginia: Executive Summary."
Long Island Index. Retrieved November 10, 2008, from
http://www.longislandindex.org/fileadmin/pdf/pollreport/Long_Island_Index_Case
_Study_Executive_Summary.pdf.
According to the Long Island Index 84% of Long Islanders believe that
high taxes are an "extremely" or "very serious" problem and a near
majority (45%) cites it as the major local problem. With an eye to finding
out how other regions address the issue of local taxes, the Long Island
Index compared Long Island to several peer suburban regions and found
one stood out in stark contrast. Northern Virginia (including Fairfax
County, Loudoun County, Fairfax City and the city of Falls Church) has
significantly lower per capita property taxes than Long Island. In order to
explore this question, the Long Island Index commissioned two studies.
First, they asked the Center for Governmental Research (CGR) in
Rochester, New York to conduct an analysis that compared local taxes in
each region in order to clarify the key cost drivers. Second, they asked
Stony Brook University’s Center for Survey Research to conduct a survey comparing how residents in the two regions felt about the services provided by local governments. They found there was the potential for greater cost savings coupled with higher satisfaction.


This paper describes the causes and consequences of post-war municipal amalgamations in Japan. It shows that recent amalgamations have been inspired in part by the desire to ensure that municipalities thus formed had sufficient capacity to deliver important public services in such areas as education, sanitation and welfare. It notes that there may be cost-efficiency gains associated with amalgamation in that the costs of delivering public services in Japan appear to be lower for larger municipalities (up to a point). Furthermore, case studies of some prefectures show that voter turnout in elections is not significantly affected by amalgamations.


This article reviews productivity and management in local government for a symposium. The authors suggest the tools of policy analysis and program evaluation become more important in periods of relative scarcity. Further, they focus on small local governments as having the most to gain from these tools. The article reviews various techniques in policy analysis and program evaluation as an overview of the productivity tools that are available.


This article evaluates the effects of population size on economic development but some comments are made about the impact on government expenditures from size or other factors. The article addresses wealth of the population as a determinant of government cost per capita expenditure.


This article provides a critique of two leading articles in the literature on productivity (economic productivity, not government productivity) and city-size. The results of this critique include a change in estimates of the productivity advantages of large cities. In particular, extant estimates of the elasticity of productivity with city size are revised downward by over
100 percent for the manufacturing sector and about 25 percent for the entire urban economy. After revision, productivity advantages of larger cities are found to be much larger for the nonmanufacturing sector than for the manufacturing sector. Hence, revitalization policies for large cities should be focused on nonmanufacturing sectors.


The authors discuss Data envelopment analysis (DEA) as a response to their view that the literature describing the performance of municipal services often uses imperfect or partial measures of efficiency. DEA has emerged as an effective tool for measuring the relative efficiency of public service provision. This article uses DEA to measure the relative efficiency of 11 municipal services in 46 of the largest cities in the United States over a period of 6 years. In addition, this information is used to explore efficiency differences between cities and services and provide input into a statistical analysis to explore factors that may explain differences in efficiency between cities. Finally, the authors discuss municipal governments' use of performance measures and problems with collecting municipal data for benchmarking.

Mower, J. (2003). City-County Consolidation and Other Regional Approaches to Reorganizing Local Government: Lessons Learned from Examples and Experts. This memo, an informal but comprehensive document prepared for the City of Syracuse, includes a selection of lists, charts, and excerpts from research conducted related to municipal mergers in varying metropolitan statistical areas (MSAs). The author summarizes the latest city-county merger of Louisville, Kentucky and summarizes case studies from several other MSAs. Substantive lists of the “easiest” and “hardest” methods of providing shared services are included, and reasons for failure or success of municipal mergers are noted.


This newspaper article examines school district costs, size, and academic performance according to national rankings of the states with New Jersey schools as its focus. It reviews state and federal funding differences as well as local property taxes. The article also relates opinions and statements on local control, optimal size and cost.


This essay examines the theoretical structure behind the metropolitan reform movement, as well as alternative theoretical structures, to better focus future empirical research on the validity of the propositions.
contained in the theoretical structures. With a better understanding of the relationships between variables such as size and multiplicity of governmental units; output, efficiency, and equal distribution of costs; responsibility of public officials; and citizen participation, reforms can be devised which will produce desired, rather than undesired, outcomes. The essay also discusses the need for agreed upon definitions of terms and their operationalizations.


Using a comparative research design, this study examines the consequences of organizing neighborhood patrol functions on a large scale by a city-wide police force or on a small scale by local communities. The research was conducted in three small independent communities adjacent to Indianapolis, and three matched neighborhoods within the city. The findings indicate a consistent pattern of higher levels of police performance in the independent communities when compared to the Indianapolis neighborhood. The findings strongly suggest that in the area studied, small police forces under local community control are more effective than a large, city-wide controlled police department in meeting citizen demands for neighborhood police protection. Further studies have been initiated to ascertain if the patterns found in this metropolitan area are also present in other areas.


The author is concerned with the call for municipal reform based on untested theories. In particular, the assertion that the number of police jurisdictions should be curtailed in favor of larger police departments has no support from the evidence. The article summarizes empirical studies on the impact of size on efficiency of government services, particularly police services.


A set of literature in public administration has recently emerged, associated with the Public Choice perspective, which argues against metropolitan consolidation and police consolidation specifically. This article reviews the major assertions which the "anti-consolidationists" make in specific reference to the consolidation of urban police departments: (1) that larger police departments are not more efficient or economical; and (2) that citizen satisfaction with urban police services varies inversely with the size of the municipality. On the first assertion the authors find that evidence is still inconclusive regarding the economy and
efficiency of larger police departments. On the second assertion, the results indicate that, contrary to the anti-consolidationist viewpoint, citizen satisfaction with police services is more a reflection of the differentiated socio-economic characteristics of central cities and suburban cities than a function of city size.

This article presents a case for smaller local governments based on notions of economic efficiency, community identity, service responsiveness, and political accountability. The arguments of skeptics (or those favoring greater council amalgamations) are challenged and refuted. The answer is to break up metropolitan councils into smaller political units and amalgamate their back offices into contestable shared service centers.

This newspaper article reports the perspectives of New Jersey state legislators, state officials, local mayors, and municipal consultants when they were meeting at the 2007 New Jersey League of Municipalities convention. The focus of the article is on the debate about consolidation - whether it will produce the cost savings its proponents claim.

This paper investigates whether the production efficiency of Norwegian local governments exhibits a spatial pattern that is compatible with the hypothesis of yardstick competition. In order to check whether yardstick competition is really responsible for the observed spatial pattern and rule out alternative theoretical explanations, the paper exploits unique information from a survey on local politicians’ attitudes towards comparative evaluation of local bureaus’ performances against other jurisdictions’ (benchmarking).

Evaluating the effects of a change in public policy setting is a critical element in the chain of accountability. Factors such as effectiveness and efficiency in government operations are often difficult to measure. In this study of efficiency outcomes, the authors follow events before and after significant structural change arising from local authority amalgamation. The study focuses on highway maintenance and uses Data Envelopment Analysis (DEA) to evaluate whether greater efficiency was achieved. Results (confined to highway management activities) show no evidence
that amalgamation was justified in terms of diseconomies arising from smallness (i.e. increasing returns to scale). While new governance practices introduced contemporaneously lifted the level of performance of local authorities in terms of higher technical efficiency, there is no evidence that the amalgamation policy contributed to this improvement. The policy impact evaluation methodology developed in this paper has potential for application to other local government service activities.


As the previous discussion has shown, it is quite possible for a single urban area to evolve in such a way that it contains many separate municipalities. Adjoining rural municipalities might have become urban over time; new urban municipalities might have been established within a former part of a rural municipality; two previously distinct urban areas might have grown into each other; or all or some of these processes might have occurred simultaneously. Ever since the mid-nineteenth century, there have been politicians, civil servants, academics, and sometimes even real-estate developers who have observed such phenomena with growing concern. They began to refer to the increasing number of municipalities within a single urban area as "fragmentation." This article discusses the need for redrawing municipal boundaries, particularly in light of different demands for service in rural and urban communities.


This article examines the relationship between city size and economic production, such as output per worker. It does not address government efficiency, although production efficiency is a general benefit to the society.


The author relates size to a number of factors, including municipal expenditures. The perspective of the article is that there may be a reason to control urban growth, but that absent a federal policy to do so, there is reason to believe the limitations may lead to inefficiencies. Government expenditures are only one of the variables investigated.
This paper examines different models of governing structure found in metropolitan areas around the world. It evaluates how well these models achieve the coordination of service delivery over the entire metropolitan area as well as the extent to which they result in the equitable sharing of costs of services. Based on theory and case studies from numerous cities in developed and less developed countries, the paper concludes that there is no "one size fits all" model of metropolitan governance.


Local government in Norway comprises a large number of small municipalities. Cost efficiency can be improved by consolidating local authorities, and central government has designed a framework to stimulate voluntary mergers. Existing theories suggest that political transaction costs will impede consolidations. The author offers an explicit test of several efficiency and cost propositions based on data for Norwegian local government.


This article considers the measurement of performance in the public sector in general, focusing on local government and the provision of library services by English local authorities in particular. The author considers two methodologies that assess the performance of local authorities in terms of the efficiency with which they provide services, and considers methods that allow for the identification of exogenous influences on performance such as the socio-economic profile of the population served by the authority. The author finds that although both methods' results appear similar, the implications for potential cost savings vary widely. Omitting to account for background factors leads to an overstatement of the level of inefficiency and hence the scope for reducing expenditure.


This newspaper article reviews Alan Karcher's then forthcoming book "Multiple Municipal Madness". Opinions of academicians about the statements in the book and the perspective of the book are included in the article. The book discusses the number of municipal governments in New Jersey and expresses a need to consolidate them into fewer units.
Tynan, N., and Bill Kingdom (2005). "Optimal Size for Utilities?" Public Policy for the Private Sector. Retrieved October 13, 2008, from <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/02/28/00090341_20050228132513/Rendered/PDF/315620PAPER0VP2830tynan.pdf>. Using data from 270 water and sanitation providers, this article investigates the relationship between a utility’s size and operating costs. The current trend toward transferring responsibility for providing services to the municipal level is driven in part by the assumption that this will make providers more responsive to customers’ needs. But findings reported here suggest smaller municipalities may face higher per customer costs and could lower costs (and prices for consumers) by merging.

Van Ryzin, G. (2004). "Expectations, Performance, and Citizen Satisfaction with Urban Services." Journal of Policy Analysis and Management, 23(3). This reference helps to explain the relationship between citizen expectation and citizen satisfaction with government performance. The expectancy disconfirmation model has dominated private-sector research on customer satisfaction for several decades, yet it has not been applied to citizen satisfaction with urban services. The model views satisfaction judgments as determined - not just by product or service performance - but by a process in which consumers compare performance with their prior expectations. The study uses data from a New York City citizen survey. Additional implications for research and public management practice are discussed.

Van Ryzin, G. (2006). "Testing the Expectancy Disconfirmation Model of Citizen Satisfaction with Local Government." Journal of Public Administration Research and Theory, 16(4). This reference helps to explain some of the conclusions in the report on optimal size and efficiency. It is important that public administration researchers and practitioners understand how citizens form satisfaction judgments regarding local government services. A prior study by Van Ryzin (2004) found strong support for an expectancy disconfirmation model of citizen satisfaction, which focuses on the gap between performance and expectations. This model has been tested for decades in studies of private sector customer satisfaction, yet it is little known and applied in the field of public administration. The present study seeks to replicate the Van Ryzin (2004) results, which were based on a telephone survey in New York City, using a nationwide sample and a much different survey methodology, namely, an online, self-administered survey of a national panel. In addition, this study tests the sensitivity of the results to two alternative measures of disconfirmation (or the gap between performance and expectations). Results using subtractive disconfirmation confirm the basic expectancy disconfirmation model, but results using perceived disconfirmation do not, calling into question the policy and management implications of the prior study.
In the last one-and-a-half decades, there has been an annual average expenditure of about one billion US dollars in the rural water supply sector in India. This has led to an appreciable increase in coverage (from 75 percent in 1997 to 97 percent in 2006, according to official statistics), but the overall improvement in the provision of water supply in rural areas has not been commensurate with the level of expenditure undertaken due to inefficiencies and wastages of various kinds. The 10-state study on the Effectiveness of Rural Water Supply Schemes, undertaken by the World Bank at the request of the Government of India, has looked at various aspects of ‘inefficiency’ along with measures to address these issues.

Developing economies are entering a new realm of agglomeration. A century of experience indicates that as countries develop from agricultural to industrial to service-oriented production, entrepreneurs and workers leave behind not just their villages and their agrarian occupations, but also a world in which scale does not matter much. More and more of them enter not just larger and denser settlements, but also a world in which scale matters - where production and distribution enjoy scale economies, especially those associated with places. Proximity matters more, not just for access to markets for goods and services, but also for access to ideas. Thus, the need for shared services and economies of scale is of increasing importance in these developing areas. This article focuses on economic productivity rather than government productivity.

A sample of one hundred and sixty-eight New South Wales local government libraries is used to analyze the efficiency measures derived from the non-parametric technique of data envelopment analysis. Depending upon the assumptions employed, 9.5 per cent of local governments were judged to be overall technically efficient in the provision of library services, 47.6 per cent as pure technically efficient, and 10.1 per cent as scale efficient. The study also analyses the posited linkages between comparative performance indicators, productive performance and non-discretionary environmental factors under these different model formulations.
APPENDIX B

Methodology

SPPA employed a methodology for the literature reviews that consisted of thorough searches in all of the major databases representing social and policy journals. In consultations with SPAA faculty, the research associates used the knowledge from the early stages of the research to refine and expand the search, as was appropriate. SPAA created or used the following tools to assure we accomplished the aims of the Commission:

- LUARCC questions from the RFP
- Bibliographic databases
- Search terms specific to each report
- Reference database
- Annotated bibliographies
- Articles/web resources

In the first phase of the basic strategy, SPAA devised appropriate search terms and used them to search all the relevant bibliographic databases. Promising articles were recorded as citations in the reference database (EndNote®) and the full-text article content was saved to the article file (as a PDF).

In the second phase of the search, research associates assigned to the project thoroughly examined the articles for findings that addressed LUARCC’s questions. The research associates recorded each finding in the reference database, attaching it to the question it addressed and evaluating the degree to which the article or information resource substantiated the finding. The research associates completed this substantiation, weeding out articles based solely on ideology and rating the remaining articles according to the amount of evidence or the concreteness of the argument presented. During this process, team members reported any new search terms or resources they encountered to the project librarian and project director. Subsequent searches utilized this additional information.

The supervising faculty member assigned to this project and the project director reviewed the results of the first phase of the search, which found the potential articles. When necessary, they redirected the search to clarify information or find new sources. In addition, the faculty members and project director reviewed each finding for relevance to the LUARCC questions.

SPAA sought LUARCC’s input through the review of an outline of the proposed methodology to ensure that the literature search was comprehensive and focused on the questions LUARCC raised. Because of the iterative process used in the information review, the early results of our search enhanced the project tools further.
LUARCC Questions

SPAA extracted the questions from the LUARCC RFP into a spreadsheet and distributed it to all team members assigned to the project. The research team coded each of these questions with a Question ID, using the listing in the spreadsheet. This allowed the research associate to link a finding from an article to the question it addressed using the abbreviated Question ID. The questions and Question ID are in the appendix.

Bibliographic Databases

The Bibliographic Database appendix lists all the literature and news databases and other information resources, such as websites and books that SPAA used to find relevant information for LUARCC. The researchers and the project librarian knew certain resources were more comprehensive and relevant for this project. SPAA focused on Lexis/Nexis Academic as a resource for periodicals, including newspaper articles, journal articles, and legal documents; Academic Search Premier as the best resource for academic journals; Business Source Premier as a similar resource; and Public Affairs Information Service for government reports, monographs, and articles.

Search Terms

The search within the bibliographic databases and in other resources used the following terms:

- Optimal size
- Economy of scale
- Diseconomy
- Size/efficiency
- Fragmentation
- Small government
- Per capita efficiency
- Scale of operation
- Size/productivity

The searches always used the following additional governmental terms as limiters:

- Municipality
- Local government
- Borough
- Village
- Town
- Township
- City
- County
- State
Since the search engines differ in their filter capabilities (and the Boolean logic which drives some of them), the research associates used their familiarity with literature searches to make efficient search decisions. They focused on North American articles, cross-cultural studies that included the United States, or other articles, despite their geographic origins, if they were applicable to the subjects the Commission wanted to investigate in a New Jersey context.

Winnowing the search results while casting a broad enough net is not always easy, and never automatic, as our preliminary analysis showed. The research associates, with faculty guidance, used their expertise in the content area they investigated and their experience with literature reviews as doctoral students to make the searches practical and the results comprehensive and responsive.

Reference Database – EndNote®

SPAA summarized the important information from the articles and reports found in the literature searches in EndNote®, a high-quality bibliographic software program by Thompson Reuters. As part of its work products, SPAA will provide a copy of EndNote® to LUARCC with the on-line annotated bibliography for all five projects it completed. A printed copy of the annotated bibliography for this project is Appendix A to this report.

The findings are the core of the reference database and of this project. The findings contain a brief extract from the article or a summary of a key point that links the article to LUARCC’s questions. The following information is contained with the findings to provide a quick review:

- **Question ID** – this will contain a project designation and identify the specific question addressed
- **Finding** – a brief description of the finding, conclusion or discussion
- **Cases** – if it is based on an empirical study, the number of cases that support the finding
- **Basis** – reviewer’s evaluation of the substantiation of the finding in the source on a 0 to 4 scale. If there is no basis, it is rated a 0; poor evidence, a 1; some evidence, 2; well substantiated, 3; considered a fact, 4
- **Unit** – the government unit or region cited in the finding

It is not necessary to use EndNote® to make the most of the project completed by SPAA. Rather, the working details contained in EndNote® are there to support this report.

Library of Documents

Each article, or an appropriate extract from the article, report, book excerpt or other research document, has been stored and will be accessible in a separate file as a Word Document or PDF. LUARCC will be able to link to it from the EndNote® reference database that SPAA will provide as a final work product. It will contain the full text of
appropriate parts of the information sources found. Hence, it will allow LUARCC or its staff to review the original information that SPAA has summarized, allowing the Commissioners to be confident about their decisions as LUARCC goes forward.

**Preparing the Final Report**

SPAA used the findings in the EndNote® annotated bibliography to organize the report for each project around the questions initially specified by LUARCC in the original RFP. In preparing the report, the faculty and project director reviewed the findings, interacted with the research associates who had found and read the articles, and, when warranted to resolve any ambiguity, read the original texts. This final review generated SPAA’s conclusions in this report. In addition to this report, SPAA will provide an overall summary report for all five projects it completed.
<table>
<thead>
<tr>
<th>RFP Question</th>
<th>Question ID</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Is there an optimal size or range of sizes for a municipal government entity from the standpoint of efficiency and to minimize duplication of efforts? Are there diseconomies of scale associated with larger governments requiring proportionally more administration?</strong> Evaluate and rank the effect of population density (a pattern of sprawl versus compactness)</td>
<td>OS1</td>
</tr>
<tr>
<td>Evaluate and rank the effect of physical expanse of the municipality</td>
<td>OS2</td>
</tr>
<tr>
<td>Evaluate and rank the effect of demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services) Evaluate and rank the effect of the extent to which important services are regionalized (for example, schools, the existence of regional utilities and emergency service compacts which limit municipal service responsibilities) Evaluate and rank the effect of character of land use (bedroom community versus heavily commercial or industrial tax base) Evaluate and rank the effect of natural features (limitations on development owing to aquifers, steep slopes, other environmental sensitivities) Evaluate and rank the effect of age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe) Evaluate and rank the effect of demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub) Evaluate and rank the effect of stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth) The optimal size of municipal governmental jurisdiction that maximizes cost efficiency in municipal service provision The identification of a range of optimal sizes depending upon municipal characteristics such as any enumerated above Whether optimal size varies based on what services are provided at the municipal level/the intergovernmental context Other variables which would be helpful for commission members to understand in attempting to identify criteria for consolidation</td>
<td>OS3, OS4, OS5, OS6, OS7, OS8, OS9, OS10, OS11, OS12, OS13</td>
</tr>
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APPENDIX D

BIBLIOGRAPHIC DATABASES

Academic Search Premier
Books in Print with Reviews
Business Source Premier
Catalog of U.S. Government Publications
Conference Board Research Collection
CQ Researcher
Eagleton Poll Archive
Factiva
Gartner Research
GPO Access
Historical Statistics of the United States: Millennial Edition
Human Population & Natural Resource Management
Index to Legal Periodicals Full Text
Investext Plus
Lexis/Nexis Academic
Lexis/Nexis Statistical
National Technical Information Service
New York Times
Public Affairs Information Service - International and Archive
SA ePublications Social Science & Humanities Collection
Social Sciences Full Text
Statistics Canada's E-STAT
TV-NewsSearch: The Database of the Vanderbilt Television News Archive
Value Line Research Center
Wilson OmniFile Full Text, Mega Edition
Worldwide Political Science Abstracts

Other Information Sources

Research and Information Resources for Public Administration
Using the Political Science and Government Literature
Public Performance and Measurement Review
http://spaa.newark.rutgers.edu/sharedservice.html
SPAA's Public Performance and Reporting Network
Local Unit Alignment, Reorganization, and Consolidation Commission

Literature Review and Analysis Related to Municipal Government Consolidation

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May 6, 2009
# Table of Contents

## Literature Review and Analysis Related to Municipal Government Consolidation

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Report</td>
<td>5</td>
</tr>
<tr>
<td>Review and Synthesis of the Literature</td>
<td>7</td>
</tr>
<tr>
<td>Comments on the Literature</td>
<td>21</td>
</tr>
<tr>
<td>Conclusions</td>
<td>22</td>
</tr>
<tr>
<td>Appendix A — Annotated Bibliography</td>
<td>24</td>
</tr>
<tr>
<td>Appendix B — Methodology</td>
<td>46</td>
</tr>
<tr>
<td>Appendix C — RFP Questions</td>
<td>50</td>
</tr>
<tr>
<td>Appendix D — Bibliographic Databases</td>
<td>51</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus in October of 2008 to conduct a review of the literature on municipal government consolidation. Consolidation of municipal government has been studied broadly and is a major area of interest for the state in its attempts to control the costs of local government.

Overall, the literature indicates that there is no compelling evidence for consolidation, except as warranted on a case-by-case basis. However, the interest in consolidation has often triggered a review of other mechanisms to provide government services efficiently and effectively. Focused solely on consolidations, the literature provides the following major findings:

- Most consolidation attempts have not resulted in consolidation.

- The results in those that have resulted in consolidation are not consistently beneficial in terms of long-term financial and political considerations.

- The financial costs of consolidation include costs of the transition, of salary and service harmonization, and of additional facilities, equipment, and infrastructure (both physical and administrative) resulting from the merger.

- The financial benefits of consolidation typically result from a reduction in work force or a reduction in facilities or equipment, and include costs avoided.

- Politics is a major obstacle to consolidation, but it should be perceived in the broadest terms to include the interests of elected officials, employees, and the public, who values local control.

- Like any potential restructuring, the costs and benefits of consolidation will be specific to the conditions and issues of the governments that are included. The costs and benefits should be assessed with recognition of the results that can be achieved realistically.
Questions from the Scope of Work (RFP) on Municipal Government Consolidation

Purpose of the Literature Review:
To address the question of whether municipal consolidation results in a more cost-efficient government. Whether or not, based on current reported experience, the formation of larger political jurisdictions through municipal consolidation results in greater cost-efficiency of service delivery? The review may include examples of city-county consolidations.

For the consolidations that have been completed, the results are mixed. However, the literature views some as successful in reducing costs or providing other benefits. The literature for the recent restructuring in the United States, however, seems to favor consolidation of functions to a regional or county level, as opposed to a complete merger of municipalities.

Whether, if cost is not a factor, are there other benefits gained through consolidation and if so, what are they?

Consolidation of specific functions has provided benefits, such as regional or centralized land use planning or economic development. Equity of service delivery and broadening a tax base to provide funding to restore deteriorating infrastructure are seen as benefits by some, but can have grave political consequences and have been the source of dissatisfaction with the consequences of a merger. Service improvement and improved responsiveness, for example, were the result of a consolidation of fire districts.

Whether there are specific instances where consolidation may be beneficial and other situations in which it is not justified from the standpoint of efficiency, equity or other criteria? If so, describe the circumstances under which consolidation may or may not be appropriate.

The most significant lesson from the literature is that consolidation is beneficial in some situations but not in others; there are no general parameters given to make this determination. Rather, a case-by-case analysis is necessary, evaluating the goals of the consolidation against the realistic possibility of how those goals would be furthered by a merger. As a corollary to this, whether equity and the redistribution of wealth or resources are beneficial is a political policy determination. The literature does indicate that consolidation is more successful if implemented voluntarily, rather than mandated.

Whether there are identified or identifiable diseconomies associated with municipal consolidation?

Sources of diseconomy include harmonization of salaries and services, the need to provide better information and management systems in a larger entity, the need to
create a new or enhanced management structure to preserve allocative efficiency, and the increased specialization of employees and equipment.

What are the lessons learned based on consolidations that were implemented?

It is important to be realistic about the transitional costs, both financial and organizational, in evaluating a potential consolidation. Uniformity, in the guise of equity of services or of salaries and benefits, can counter any potential cost savings. It is prudent to reduce annual operating costs, through a reduction in the workforce or the facilities and equipment, in order to offset the transitional costs of consolidation. Reductions in employees, however, can increase workloads and cause poor response to citizens’ requests. Political representation is an issue that must be resolved in a merged government. Considerations of the use of the broadened tax base are a political decision.

Are there cost savings associated with consolidations?

The results are mixed. Some of the answer may lie in controlling the diseconomies associated with consolidation, but some diseconomies may be inherent in an increasing scale of operations. The literature suggests detailed evaluation of the facts and circumstances of each case.

Are there hidden or other costs associated with consolidation that led to a failure to consolidate?

Although transitional costs, including the need for additional facilities and equipment, are significant, the literature most commonly assessed them for completed consolidations. The literature usually indicates reasons other than financial for a failure to consolidate.

Are there other obstacles to consolidation which were commonly identified in multiple situations?

The literature noted that the need for structural changes to accomplish consolidation is a disincentive. If these changes, which are usually legal and organizational, are undertaken, the desired gains in efficiency will require a relatively long timeframe to achieve. Political concerns of elected officials and parties in power have scuttled consolidations. The loss of local control of the level of services and their delivery is a concern of the public, as well as elected and appointed officials. This includes the differences in perceived needs for services and regulation in different types of areas, such as urban and rural. Differing tax bases and tax rates present obstacles or opportunities, depending on the policy goals of the consolidation. Fear of job loss and increased workload are issues for unions and employees. Combining different unions, or union and non-union municipalities, presents an obstacle. Ironically, successful regionalization and prior inter-governmental cooperation provide alternative paths to achieving
greater efficiency and, therefore, reduce the perceived need to take on the more drastic changes required by consolidation.

Are there any legislative impediments which were identified in the literature that were viewed as obstacles?

The literature addressed legislative impediments, but they are specific to states and countries. The Canadian literature indicated that the lack of relevant laws in the United States prevents mandatory consolidation from being imposed by states, but considered this a good thing. There were other specific references to laws allowing consolidation, which added restrictions that made consolidation less attractive. Some labor laws required amendment for specific consolidations to occur.

Are there any thresholds beyond which consolidation became less cost-efficient?

The consolidation literature did not specifically address thresholds. Some of the literature that found cost savings resulting from consolidation also found the amount of the savings decreased with increasing size of the merged municipality, but no thresholds were stated.
PURPOSE OF THE REPORT

To meet its overall goals as expressed in the legislation signed into law on March 15, 2007, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) commissioned a literature review to address the question of whether municipal consolidation results in a more cost-efficient government. The enabling legislation for the establishment of LUARCC states:

Consolidating local units, structurally and administratively streamlining county and municipal government, and transferring services to the most appropriate level of government for delivery would help to alleviate the property tax crisis by reducing the administrative costs of local government and making the delivery of local services more efficient due to economies of scale.

In the RFP it issued, LUARCC stressed several questions to be addressed. The Commission also expressed concern that the review of the literature should take into consideration the diversity of local governments and local government conditions in the State of New Jersey. The primary question was whether the formation of larger political jurisdictions through municipal consolidation results in greater cost-efficiency of service delivery. Aside from cost considerations, the Commission also asked whether there were other benefits to consolidation examined in the literature and under what circumstances any of these benefits may or may not be appropriate. SPAA was asked to seek evidence in the literature of any diseconomies associated with consolidation.

These questions guided SPAA’s search of the literature to uncover evidence of cost efficiencies or lessons learned from consolidations which were implemented, or of obstacles, legislative impediments, or other costs that were encountered in attempts to consolidate. The annotated bibliography that is included in this report is the result of that research. SPAA has synthesized the information in the articles and other documents that are listed in the bibliography and arrived at the conclusions presented in this report.

There is a commonly held belief that efficiency will be improved by reducing the number of units of government and combining them into larger units. Alan Karcher’s book New Jersey's Multiple Municipal Madness, (1998) is his treatise on the concept that there are too many municipalities in New Jersey. Karcher reviews reasons new governments were created, finding that some were for the benefit of a small group of people or for other reasons, which would not be perceived now as benefitting the state as a whole. He concludes that the current fragmentation is not appropriate and discusses both voluntary and mandatory consolidation as approaches to resolving the current inefficient situation.

A study of Post-War Japan accepts the premise of consolidation. The author states that it is widely accepted that “amalgamation will increase the efficiency of local government …” (Mabuchi, 2001). However, the author maintains that responsiveness to local
residents is also an offsetting issue in consolidation. “… it is also generally believed that there is a negative effect on democracy.” Throughout the literature, there is tension between the basic belief in efficiency of larger governments and concerns about the unforeseen consequences of consolidation.

The experience in Iowa is emphasized throughout the literature review that follows. Iowa faces a similar situation to New Jersey, with well over 3,000 local governments in a less densely populated state (Greenblatt, 2006). Iowa has 36 local governments for every 100,000 people. With a stagnant tax base and few options, Iowa’s governor proposed replacing all the local governments with 15 regional governments. Although the proposed consolidation was not well received in a state that is proud of its local police forces and fire districts, the municipalities of Iowa are working together now to a much greater extent. So far, there have not been tremendous cost savings from this increased cooperation. As Greenblatt states with regard to Iowa: “For local officials, saving a lot of money right away isn’t as great a concern as doing things more efficiently when they can, whether that means streamlining internally or reaching out to new partners.”
A Case for Consolidation?

Although there is some support for reducing the number of governments and, consequently, increasing the size of the remaining governments, there is a considerable body of literature that does not support consolidation. Most of the interest in consolidation has been focused on reducing the number of small municipalities. A 1987 report by The Advisory Commission on Intergovernmental Relations (ACIR) entitled, “The Organization of Local Public Economies,” reviewed the studies of several researchers. The report concluded that per capita costs generally fall with increasing size for municipalities with populations up to 25,000, remain fairly constant for those up to 250,000, but then rise significantly. This pattern is represented by an inverted U-shaped curve relating municipal size and efficiency. Katsuyama’s review (2003) of the work of those studying consolidation efforts concludes that the vast majority of services show no economies of scale beyond a population of approximately 20,000.

Norway has been reducing the number of municipalities substantially since 1952, when the initial thrust was to form municipalities of at least 2,000 inhabitants. The evidence of an empirical analysis of these consolidations showed that consolidation did reduce per capita expenditures (Hanes, 2001). However, there were two important caveats. The first was that the results were not significant when the researcher controlled for selection bias. The second is that the cost savings from consolidation declined with municipal size of the consolidated municipality.

As a body, these findings do suggest success in merging the smallest municipalities. However, a tense debate rages between states and localities over just what local government should look like (Fox and Gurley, 2006). Municipalities across the country have pushed back, and the debate ensues in New Jersey, New York, and Ohio. There is significant debate about whether consolidation is the best way to help people. Much of the debate is about cost savings. Many studies have found that larger municipalities are not generally the most efficient for specific service types.

A comprehensive review by Bish of fifty years of evidence about the relationship between the structure and performance of local governments in metropolitan areas leads the author to conclude that consolidation eliminates the very characteristics of local government that are critical to the most successful and least costly government systems (Bish, 2001). He urges: “policymakers need to change their way of thinking about urban governance, from the obsolete and discredited idealization of large hierarchical organizations to a research-based understanding of the conditions under which cities can function successfully.”

Byrnes and Dollery (2002) find it clear that the research on economies of scale in local government does not support the proposition that substantial efficiency gains would flow from the formation of larger local governments. Efficiency and economy may not be the strongest arguments for consolidation (Ho, 2004). It is difficult to prove or to promise
future tax savings. Voters are not easily swayed by promised savings, perhaps because they fear cuts in service as a logical extension of tax savings. There are other alternatives to achieving cost efficiency in services.

Sancton (1996), who has studied municipal consolidation in Canada, proclaimed that “The days of large-scale centrally imposed municipal reorganization are clearly over.” He was stunned that the policy-makers were unaware of the academic literature about the impact of scale on local government costs that showed precious little evidence to support a consolidationist position. His study cited the statistical work in Great Britain, which was largely ignored by the Royal Commission on Local Government when they recommended large, single-tier units of local government for England. He also observed that the United States had come around, noting that the Advisory Commission on Intergovernmental Affairs, although it was previously a staunch advocate of metropolitan consolidation (as indicated at the beginning of this review), had reversed its position by 1987 and was supporting fragmentation.

Fox and Gurley (2006) provide a comprehensive review of whether consolidation works, but conclude: “…no single policy advice can be given on whether consolidation is a good idea, with the facts and circumstances of each case determining whether consolidation or not (sic) is beneficial.” Governments should not assume consolidation will solve problems, because benefits and costs are specific to each situation. Consolidations may, but do not inevitably, save money.

Other studies support this notion of the importance of the specific circumstances, if only because of their absolute disagreement with one another. Jordan sees consolidation as the solution to the problem of governance following the consolidation of smaller units into the Greater Amman Municipality (Malkawi, 2003). However, Malkawi feels the practice of consolidation preceded the perception of the problem of the multiplicity of administrative units, and, therefore, was not implemented as a solution to the problem. Ostrom has a similar concern. “We find in the described studies a consistent pattern of evidence that contradicts the assumptions made by proponents of consolidation; we cannot support their belief that consolidation affords "the" solution to "the" urban problem.” (Ostrom, 1976)

Both Fox and Ostrom see size economies as being service-specific. As was detailed in the literature review of Optimal Municipal Size and Efficiency, infrastructure intensive services show benefits of size, which makes an indirect case for consolidation of smaller units or some other measures that would reap the same benefits. Fox and Gurley observe that bureaucrats have been noted for being efficient at the things they want to do, and inefficient at those they do not. In these instances, alternative delivery mechanisms could be identified in hopes of obtaining the same benefits that are expected from consolidation, but without the efficiency losses which occur because of the unwanted implementation of consolidation. Economies of scale are not the only criteria on which to determine the benefits of consolidation. The authors mention that land area, population density and geographical attributes may affect the benefits of consolidation.
In Western Germany, mergers that occurred in the ‘60’s and ‘70’s show significant economic impacts, such as a 20 percent lower level of debt (Blume and Blume, 2007). The authors find that the financial situation of city regions where the core and the hinterland are separate administrative districts is worse (in terms of public debt as a ratio to tax income) than in single district regions. Further, in evaluating economic impacts on the governments, mergers are superior to a “strategy that relies solely on soft or hard functional cooperation.”

On the negative side of the ledger, there are several concerns that must be considered to understand the impact of consolidation. Consolidation, by its nature, reduces government competition without necessarily reducing overall government size (Fox and Gurley, 2006). To be cost effective, consolidation must be accompanied by the elimination of redundant workers, at least in the long term. The authors also note transition costs can be quite high in specific instances, particularly if infrastructure modifications or enhancements are required or capital-funded facilities are added. This emphasizes the point that consolidation only reduces costs if expenditures of the combined governments are lowered.

The transitional costs for a Canadian consolidation creating the City of Abbotsford were about $1.5 million. Annual projected savings were $1 million (Vojnovic, 1998). Campbell and Selden analyzed the transitional costs for a consolidation between the City of Athens and Clarke County, Georgia that was completed in 1991 (Campbell and Selden, 2000). The estimates of the 1991 costs were:

- $470,353 for one-time operating and capital costs necessary only because of the unification
- Nearly $5 million to implement the recommendations of consultants who conducted classification and compensation studies
- More than $2 million for annual personnel costs due to the harmonization of the pay and fringe benefit packages

A World Bank report that analyzes different models of government structure confirms the concern with a loss of competitiveness that results from consolidation. The report elaborates that there is less incentive to be responsive to local needs (Slack, 2007). The author references Boyne’s 1992 empirical review of consolidated versus fragmented governments in the United States. One source of the cost difference is that compensation levels rise to the highest levels in the pre-consolidated governments. An additional factor mentioned by Slack is that service levels also rise to the highest expectation of the most serviced community. Gregory C. Fehrenbach, a consultant for the New Jersey League of Municipalities, noted that when towns merge, residents are often unwilling to give up services. He used an example of two towns, one with twice-a-week trash collection and the other with weekly collection. Because the residents of the town that had trash picked up twice a week did not want to give that up, both towns ended up having twice-weekly service. "You can't just make the assumption that larger is better," Mr. Fehrenbach said (Peters, 2007).
Transitions to achieve a consolidated government can take two to three years to work out and require a melding of different service cultures of the organizations (Rosenfield and Reese, 2004). This is not a trivial matter, nor should it be assumed that the most effective service culture will emerge. The bottom line is also affected by compensation packages, which will rise to the highest level among the pre-consolidation governments, and by an increase in equipment and technology necessitated by a larger workforce.

Consolidations are often weighed without being realistic about how the merged government will operate. It is logical to assume scale efficiencies, for the services in which they are operative, will increase after consolidation, because they are based on economies derived from increased size. On the other hand, allocative efficiencies, which are derived from managing the use of resources, cannot be assumed to increase with size. In fact, Fox and Gurley reflect on the practical realities of such a drastic change as consolidation: “The involved people, local and national bureaucrats, local and national politicians, and service deliverers, may thwart or enable the consolidation, depending on the design. They will to a very real degree determine whether it works or fails.”

Some of the literature has looked at other benefits of consolidation. Although these are often financial in nature, they are not of the same ilk as direct cost savings for increasingly efficient operations of government. The Toronto consolidation, establishing a single-tier government from what had previously evolved into a two-tier government, is a well-known and completed consolidation which has been the source for several of the articles found in the literature search. Although the literature does not make the case that the Toronto consolidation created cost savings, one of the changes that occurred because of the consolidation was the ability to make citywide planning decisions that would never have made it through six units of government (Grant, 2007). In essence, the benefits of regional planning have accrued without the difficulties of implementing and achieving a regional outlook among distinct governments.

In a similar manner, long term economic growth and vitality is easier to achieve in a single government structure, rather than across several individual governments in a region (Ho, 2004). The approved consolidation of the City of Louisville with Jefferson County is a good example to support the author’s point that consolidation will be encouraged only if there are perceived concerns about an area’s economic future. As the Brookings Institution (2002) concludes:

… an agenda of transformation to a changing community-one with a resilient economy and high quality of life that are increasingly imperiled by economic change, persistent racial divides, decentralization, and the relatively low education levels of its people. This agenda charts how a renewed Louisville can build on its assets, strengthen families, fix the basics, influence metropolitan growth, and sustain its neighborhoods in order to make itself a top-rank “competitive city.” In doing so, it takes a deliberately broad view of “competitiveness."
An analysis of a fire district merger in Ada County, Idaho found the potential to increase service levels with no increase in costs (Curry, 1999). This proposed merger of four fire districts would allow an increase in staffing and the ability to make the chief officer responsibilities more specialized. Standardized training for paid and volunteer members and an enlarged prevention department would also be possible without increased costs.

Obstacles to Consolidation

Sancton (2001a) examines the arguments of public-choice theorists against consolidation. The main argument is that maintaining many municipalities in the same area increases the level of competition between the municipalities and allows each municipality to determine its own service and tax package to attract particular residents and businesses. Public-choice theorists have addressed the issue of whether competition between municipalities is detrimental to planning and development in a regional area. They argue that regional planning is unnecessary, noting the development of infrastructure in the U.S. succeeded without a plan. They counter the argument promoting redistribution of wealth in a merged urban area by stating that such redistribution is the province of central, not municipal, governments, so it should not be a reason for consolidation.

Different needs for services do present one of the difficulties in consolidating communities, particularly if they are greatly different, like urban and rural areas. These areas often have different service requirements and, consequently, different service costs and tax bases (Sancton, 1996, 2001a). If the merged community resolves the issue by providing service equity throughout the entire area, costs may rise, because it is not usually acceptable to reduce service to the lowest pre-consolidation levels. There is a related issue in terms of the higher amounts of regulation that typically have evolved in urban areas. A merged rural area may not welcome the increased government intervention which could conflict with notions of self-sufficiency.

Service delivery subtleties affect how much area to include in a consolidated metropolitan area. The type of service is important. Functions like regional planning are best in a broad area that might include heavily developed and sparsely developed areas that need to be considered in relationship to each other for planning purposes. However, that same combination of heavily and sparsely developed areas has a very different impact on functions such as garbage collection. The policies and procedures that make sense in a densely populated area may produce inefficiencies in a sparsely populated area.

One study looked specifically at legislative impediments to consolidation in its review of fourteen detailed case studies about city-county consolidations in the United States from 1967-1999 (Leland and Thurmaier, 2004). Most of these attempts were unsuccessful or took several tries before they were completed. Most of the successful ones reduced the total number of elected officials in order to show cost savings. The successful cases needed a vote of the state legislature to pass special legislation supporting a consolidation process. Some cases required a constitutional amendment. But legislation can be too restricting and create further obstacles. In North Carolina, for example, the law which authorized consolidations stated that the larger government entity must be abolished.
An important distinction arises in assessing the feasibility of consolidation. Although there is some connection between the two, the financial efficiency of a consolidation is indeed different from the political feasibility of accomplishing it. *Optimal Consolidation of Municipalities: An Analysis of Alternative Designs* (Carey et al, 1996) presents an econometric model for estimating the cost savings of a potential consolidation. The model is applied to municipalities in Allegheny County, Pennsylvania. The authors conclude: “… citizens are much less likely to accept a consolidation plan that greatly disturbs the existing tax and service levels.”

The popular press brings this thought home. “Consolidation has very little to do with saving money,” Carl A. Bergmanson, mayor of Glen Ridge, New Jersey, said at a group discussion on consolidation. Mr. Bergmanson's point was that large city governments were often far more inefficient than the governments of small municipalities like his (Peters, 2007).

The tension between financial and political considerations is demonstrated in Sorensen’s study (2006). The author first remarks on considerations of cost: “Cost efficiency can be improved by unifications, and central government has therefore designed a framework to stimulate voluntary mergers. Efficiency gains are larger among authorities with a small population base.” However, in the same article, Sorensen also recognizes the difficulty of achieving consolidations in some of the same governments which may have the most to gain financially:

- Local politicians and top administrators in small municipalities remain more reluctant to merge than leaders in more populous municipalities.
- Elimination of revenue disparities would certainly further consolidations, but local leaders (and probably citizens) are prepared to pay a price (in terms of diseconomies of scale) to persist as independent polities.

Sorenson’s (2006) study in Norway describes political transaction costs as obstacles to consolidation. The central government has promised to maintain grant levels in local governments, which are generous, to compensate for diseconomies of scale. However, the promises may not be credible. Property rights have been nullified after consolidation, prompting municipalities with high revenues to oppose merger with poorer neighbors. Expected changes in party representation in a consolidated government lead to opposition to consolidation. More senior politicians, particularly those from small governments, oppose consolidation.

Political representation in the consolidated government is an obstacle and may become a problem after consolidation. The issues vary depending on the types of communities that will be combined, their respective populations, and the electoral process in place, or that will be put in place. In Vermont, the population in the Town of Essex outnumbers that of the Village of Essex Junction. In a 2006 article in the *National Civic Review*, Santucci argues for a proportional representation scheme to achieve equity. This unusual approach attempts to ameliorate the problems with more conventional voting systems, which the
author reviews in coming to his voting system recommendation for the merged towns. Each potential consolidation situation may present different problems that require a solution specific to the needs of the communities involved.

In Ottawa, Canada, the representation of the rural areas is an issue. Much like in the Vermont consolidation, representation by population would result in no effective representation for the rural areas, but a different mechanism would be in conflict with democratic principles (Sancton, 2003). Eventually, Headingley, the most rural community, was allowed to secede from the Ottawa consolidation.

Sancton (2000) also mentions different or non-existent unions as an obstacle to consolidation. In the province of Ontario, legislative amendments were needed to allow the formerly non-unionized Pittsburgh Township employees to enter the Kingston union with accumulated seniority rights. Although the changes were legally enacted, the unions were not pleased with the solution.

The Monroe County Council of Governments (COG) was formed in 2000 as a voluntary association of municipalities in Monroe County, New York. In 2003, COG and the RUMP Group, an organization of local business leaders, combined their efforts to look at further opportunities for cooperation or consolidation to counter the fiscal stress affecting local government (Judson and Carpenter, 2003). The conclusion in Monroe County was that the timeline on achieving cost savings through consolidation was far too long, because of the structural and legal changes that would be required by a physical merger. Since the GRIP-NAPA report of over thirty years ago, recommending a two-tier government and establishing an initial central agency to encourage collaboration in Monroe County, cooperation and innovation have occurred incrementally throughout the county.

For Monroe, the success of functional cooperation in the past represents an obstacle to consolidation. COG is a regional association that maintains a focus on promoting efficiency for municipalities throughout the county. This same phenomenon is seen in British Columbia (Sancton, 2005). A successful implementation of a two-tiered government utilizing regional districts has staved off the consolidation movement so popular in Canada in the latter part of the 21st century.

**Lessons Learned**

The lessons from consolidations that were completed add to the lessons from obstacles that derailed or stalled consolidations. McKay (2004) found that efforts to achieve efficiency in a newly consolidated government could take a back seat to concerns of achieving equity and uniformity throughout the consolidated area. The other concerns McKay raises from this case study are general questions about change management, such as clarity of goals, roles, and deadlines and good communication.

In a study of five Canadian consolidations, greater needs for service delivery and governance in rural areas echo the concern with increased costs generated by the equity
issue (Vojnovic, 2001). This study also detected the harmonization of salaries as a cost containment issue resulting from consolidation. The overall results in salary costs were mixed for the five mergers because some mergers resulted in a reduction of employees and one, Abbotsford, set reasonable expectations for salaries before the consolidation occurred. Abbotsford also established a political forum of residents of the former districts that approved all initiatives. This mechanism might have provided the courage to keep costs in check.

However, in an earlier study (Vojnovic, 1998), the author noted that Abbotsford had also reduced staff in the consolidation, which helped it to reduce administrative costs. The staff members were affected by relocation, new work standards, and an increased level of required teamwork within the larger municipality. The employees also faced a significant increase in workload, which resulted in delays in processing inquiries, complaints and applications.

In four of the five mergers in the 2001 study, increased specialization occurred after the merger in two distinct areas. Employee specialization resulted from a greater volume of work that was repetitive. Equipment specialization, such as that resulting from the need for better accounting and information systems, followed from increasing the complexity of managing a larger organization.

Vojnovic found that there has been little evidence of cost savings in the consolidation of larger municipalities. He attributes this lack of success to diseconomies of scale, higher wages resulting from specialization, and greater transition costs, such as those required to restructure a larger bundle of services.

Over a ten-year period, Sancton has written frequently on consolidation, with a focus on the Canadian attempts to find a better method to govern and deliver services to its citizens. Different structures have been implemented throughout the last fifty years. Some of the variety in the nature of the attempts is due to the fact that Canada has vested more powers in its provinces to mandate restructuring, without approval of the municipalities, than the United States has permitted in its states.

Sancton (2001b) blames this central power for some of the difficulties that have resulted, comparing provinces that mandated consolidation with one that allowed it to occur as the municipalities desired. The Greater Vancouver Regional District (GVRD) was formed with the consent of its member municipalities. The consolidations that occurred in Toronto and Montreal, which have been beset with more severe problems, were mandated and did not achieve agreement of the consolidated municipalities. Vojnovic (1998) agrees that voluntary consolidations are more successful and that centrally imposed timeframes also act as an impediment to success.

Sancton states that the GVRD model is more similar to what is practical in the U.S., where states cannot mandate consolidation (without legislative or constitutional changes). The mobilization of forces in Vancouver to promote a regional solution created support for the solution that was eventually implemented. The provincial mandates in Ontario
and Quebec did not need this support. Therefore, they did not obtain it, nor did they have it when it was needed.

Although this report focuses on consolidation, the Canadian experience is not just a crucible for consolidation. It offers lessons about consolidation as a remedy to other structures of governance, even though the subsequent consolidations largely have not succeeded for other reasons. Sancton’s 2005 article provides a history of the actions and reactions in Canadian governance. The main thrust of the 1950’s and 1960’s was to form two-tier governments. A metropolitan layer of government is established for functions that benefit from a metropolitan level solution, such as land use planning and infrastructure maintenance and development. Local municipalities continue to provide services such as zoning and recreational programs. (Note that two-tier governments are discussed further in *Optimal Service Delivery Arrangements and Efficiency.*)

The formation of two-tier governments occurred in four provinces. Ontario, Quebec, and Manitoba have subsequently abolished these two-tier governments to resolve unforeseen problems. On the other hand, British Columbia established a network of regional governments in the 1960’s, which still exists, and that provided metropolitan level solutions, but British Columbia never recognized them as a separate layer of government. They replaced many special purpose bodies (special districts) that had been formed previously by multiple municipalities. The new regional districts encouraged inter-municipal cooperation and allowed municipalities to opt out of regional services (or cooperate with other municipalities, even outside the region). The board of directors of each regional district consists of members of municipal councils. The directors have numbers of votes proportional to the population they represent in the region. Sancton likes the solution:

> Although it is impossible to determine objectively an ideal institutional model for metropolitan governance, it is hard to imagine a mechanism that could better combine local self-government through established municipalities with the existence of an institution at the metropolitan level that can both provide a degree of consensual metropolitan leadership (the strategic plan) and a framework within which municipalities can voluntarily cooperate with each other.

A two-tier government has inherent conflicts between the two governing tiers. In addition to Canada -- London, Rotterdam, Copenhagen, and Barcelona have shown this form to be unstable (Sancton, 2001a). In Toronto, Ontario by the 1970’s, the two-tier government showed sources of conflict in that the suburbs did not want to support rebuilding deteriorating central city infrastructure and in that the upper-tier was spending an increasing share of total municipal revenues. A move to have the upper-tier council directly elected was successful in 1988, but it led to increasing conflict between the two levels of government. In 1996 Toronto decided to merge into one government for the City of Toronto for the stated purpose of saving money. Sancton (2005) sees this move as removing all ability of the rural and peripheral areas to self-govern. Other parts of this
report show there is considerable doubt about whether the goal of saving money was realized by the Toronto consolidation.

Manitoba’s effort to create the Corporation of Greater Winnipeg resulted in the abolition of the Corporation within ten years, despite the attempt of the initial effort to avoid the political conflicts of a two-tier government. The directly elected members of the Corporation sat on 13 community committees that advised the main council on local matters. These committees were advised by residents’ advisory groups that were chosen at open community meetings. The interest in these advice and consulting functions waned, increasing suburban political strength led to conflicts over funding central city infrastructure, and, generally, tensions between the two levels led to the demise of the Corporation.

Quebec reacted to its two-tiered problems in 2000 by merging the communities in Montreal and Quebec City. In Montreal, the Mayor wanted to promote social equity by using the stronger suburban tax base. The opposition Liberal Party won the election in 2003 by pledging to provide a legislative mechanism for de-mergers, which they did. Despite a confusing set of rules that required public approval, fifteen de-mergers were approved in Montreal and one in Quebec.

An analysis of the 2004 Quebec referenda on the de-mergers of municipalities determined citizen preferences regarding consolidation and fragmentation (Tanguay and Wihry, 2008). The authors observe that the referenda on consolidations, which had been imposed from above, approved many consolidations which had not taken place but were justified on economic grounds. Thus, voters may well be expected to favor a merger if they expect a reduction in the tax-price of local services.

The Quebec legislature also created the concept of metropolitan communities (Sancton, 2005), which are similar to the regional districts that have been successful in British Columbia. They have responsibility for functions such as regional planning, waste disposal, regional infrastructure, and regional parks. The success of British Columbia's regional districts is attributed to a number of factors, in addition to the steadfast refusal to treat them as another level of government. The regional districts have demonstrated flexibility in providing a hybrid of services, both upper- and lower-tier, based on the requirements of the municipalities. When required, the districts have also acted as administrative agencies for projects or services undertaken jointly by their member municipalities, further demonstrating their ability to accommodate specific local needs (Vojnovic, 1998). The results of creating the metropolitan communities in Quebec are not yet known. Over the last fifty years, Quebec City has been a two-tier government, a consolidated government, and now a government with a regional district.

**Specific Attempts**

The literature describes both successes and failures. The term “success” is often used to mean completed and “failure” to indicate abandoned. Of those attempts at consolidation that were completed, there are opposing camps about whether the consolidation was
actually a success in achieving the goals it intended or in delivering other benefits that were not anticipated. Both the economic and political feasibility need to be considered when evaluating a proposed consolidation.

Overall, Benton and Gamble (1984) underscore mixed results in the literature:

An article a few years ago declared that “metropolitan reorganization via consolidation is not a dead issue, but it is certainly not very healthy” (Marando, 1979:426). The author of that article builds a strong case for his conclusion by citing numerous instances of rejection by voters, court cases that require concurrent majorities for affected areas, and more significantly, a lack of evidence that consolidation produces economies in government (Marando, 1979:419-21). However, the more general literature pertinent to governmental reorganization and the issue of "economies of scale" in government is divided to the point that there is no definite answer to the question of scale. On the one hand, part of the literature reports diseconomies of scale (Bish and Ostrom, 1973; Gabler, 1969; Hirsch, 1959; Schmandt and Stephens, 1960). On the other hand, some studies have shown mixed results, with economies of scale for some categories of expenditures, diseconomies for other categories, and no relationship for the rest (Alesc and Dougharty, 1971; Hirsch, 1968; Morgan and Pelissero, 1980).

A 2004 study showed that since 1990, only five city-county consolidations have succeeded: Athens/Clarke County, Georgia in 1990; Lafayette Parish/City of Lafayette, Louisiana in 1992; Augusta/Richmond County, GA in 1995; Wyandotte County/Kansas City, Kansas in 1997; Louisville/Jefferson County, Kentucky in 1999. (Ho, 2004) As mentioned above, Case Studies of City-County Consolidation (Leland and Thurmaier, 2004) contains a total of fourteen case studies of city-county attempts beginning in 1967, most of which were not completed.

The consolidation of Athens with Clarke County, Georgia provides some lessons for the would-be consolidator (Campbell and Selden, 2000). The authors detail additional costs of $7.5 million, which were presented earlier in this report. Despite these high costs, the authors conclude that consolidation can be efficient and result in cost savings in some departments. They emphasize that the amount of money saved in a merger will depend on the design of the new government, as reflected both in its charter and the policy and management decisions of its elected and appointed officials. A comment in this study, which bears consideration because of its political ramifications, is that the unification charter determined that water rates would be equalized by increasing the rate paid by city users and decreasing the rate paid by county users.

Table 1 below examines total expenditures between 1990 and 1997, which included the two years preceding and six years following unification. The comparison of the general fund total operating expenditures for Athens-Clarke County (in real dollars) with the expenditures of three unconsolidated city-county governments in Georgia over the same
eight-year period shows that in Athens–Clarke County they increased at a rate noticeably lower than in the three comparison groups in both the short and long term.

Although the table shows only the percentage change (of increase) for total expenditures, the article also examined the sub-categories which are not shown in the table. In the sub-categories, there were some declines in costs in the five years after unification in Clarke County. General government expenditures (including internal support units) declined by nearly 10 percent, the only major function to experience a decrease in expenditures. Finance expenditures decreased both in the short and long term, although one of the non-consolidated comparison groups also decreased.

A consolidation of Jacksonville with Duval County led to a long-term impact of a 1.6 percent tax increase from 1969 to 1981 (Benton and Gamble, 1984). Over the same period of time, the comparison area (Tampa-Hillsborough County) reported a 1.8 percent increase. (Prior to consolidation the tax rate was declining in both Jacksonville/Duval County and the control area, but the long term impact over six years eventually showed an increase in costs in both areas resulting in the 1.6 and 1.8 percent increases in the tax rate over the total period.) Consolidation certainly did not prove to be an instrument which reduced the amount of revenue derived from the citizenry in the long run. In fact, these findings are opposite to the main hypothesis that consolidation will reduce costs and, therefore, taxes. Consolidation had an insignificant impact on property tax revenue in both the short and long run. Public safety expenditures increased as a result of this consolidation, as was suggested by Ostrom’s work in the 1970’s. Prior to consolidation the rate of change for public safety expenditures had been a decline of 0.1 percent.
similar to the decline in the Tampa/Hillsborough County area. After consolidation, the merged Jacksonville entity showed an annual increase of 3.3 percent.

A newspaper article cited much better projected results for citizens in another Florida community (Sharockman, 2004). A study showed that West Oldsmar homeowners would save $100 or more a year, and Oldsmar would see more than $100,000 in additional revenues annually if the city incorporated the 142-acre enclave into its boundaries. The savings to homeowners would come in the form of lower property taxes, as well as reductions in taxes, fees or surcharges that residents now pay for garbage collection, water, and sewer service.

In the county of Westchester, Pelham Manor and the village of Pelham decided not to merge. Pelham Manor was smaller but had a more valuable property base. So even if there were some savings in consolidation, Pelham Manor's taxes might have gone up. Residents of Pelham Manor would, in effect, have picked up more of the costs for the newly merged community than their neighbors. They would have contributed more with less say in how taxes were spent. (Fessenden, 2006)

An article from the Toronto Gazette has considerable detail about the problems that followed the Toronto consolidation (Sewell, 2000):

The provincial government first estimated that the Toronto amalgamation would save up to $250 million. What the province seemed to forget was that 73 per cent of the $5 billion spent annually by municipal governments in Toronto was spent at metro level on services that had been centralized or amalgamated years ago: police, transit and social services. The only savings possible would come from the $1.5 billion spent by the local governments on things such as libraries, parks and recreation, planning, public health, garbage collection, water and sewage and fire services.

Attempts to cut salary costs were foiled by lean staffing prior to consolidation and an increase in fire salaries to the highest of the pre-consolidation levels. Although some cuts were realized ($134 million), they were offset by increases in the first two years ($154 million), by the high costs of necessary studies, buying new technology, and equipping centralized facilities.

Sewell sees the reduction in executive staff that occurred after the consolidation as stripping the government’s ability to provide powerful executive level advice for changing times. The reduction of departments from 52 to 6 and of divisions from 206 to 37 was accompanied by the reduction of area managers by a third, from 1,837 to 1,204, and of executive management positions by two-thirds, from 381 to 154.

With 850 of the most senior staff removed from the workforce, local government suffered a loss in corporate memory and expertise. This loss of senior talent reduced the productivity of the workforce and the ability of the city to plan for its future.
The article continues by reporting that cuts made to litter services have had an impact on the public in this traditionally clean city. Recreation programs, once free as a matter of social policy, now have user fees attached, leading to a decline in participation and fewer programs being offered in the downtown area. Public transit fees were increased. Response has slowed for tree maintenance, building permits, and variance hearings. Finally, the author contends the creation of one large council has led to inaccessibility to local decision-makers and the shift of power into the backrooms of the mayor’s office.

A more recent article on Toronto (Grant, 2007) sees the same problems as were evident at the time of consolidation. However, it also sees the benefits of a central government for regional planning.

Although the Brookings Institution study of the approved Louisville/Jefferson County merger did not evaluate the impact because the merger was not completed at the time of the study, the details of the agreement are interesting because they allowed for considerable flexibility and power to be exercised by the merged Metro Mayor and Council (Brookings Institution, 2002):

Small incorporated cities will not be affected by the merger either. All of their existing powers are preserved. All fire departments and other service districts will also continue to operate as separate entities with all their current powers. The merger referendum does not specifically require the merger of the police or any other government departments. Decisions on consolidating these departments will be made by the Metro Mayor and the Metro Council after the new year.

The consolidation of the Halifax Regional Municipality was implemented to save money and reduce the competition between municipalities for economic development (Sancton, 2005). The new municipality implemented three different tax rates -- urban, suburban, and rural -- corresponding to different levels of service. The author states that there is no evidence that money has been saved. The effect of the consolidation specifically on police services in Halifax was studied (McDavid, 2002). The study concluded that consolidation led to overall cost increases, lower service levels, and no effect on the crime rate.

The 1999 Halifax Regional Municipality Citizen Survey asked citizens about the consolidation (Poel, 2000). Citizens did not have a favorable assessment of the HRM amalgamation decision or the performance of their Council, did not see the geographical, social and economic diversity of the HRM region as a strength, and did not think municipal services had improved.
COMMENTS ON THE LITERATURE

One of LUARCC’s main concerns was the development of criteria to determine where consolidations would be most effective. Because the literature does not agree on a “one size fits all” solution and because the estimation of potential cost savings or changes is complex, specific criteria cannot be used to identify consolidation candidates.

The literature makes a clear distinction between the rational financial basis for consolidation and the political or cultural environment that will allow consolidation to occur, much less make it pay off. There are not enough credible examples from which to draw consistent lessons. What we do know is that there has been significant resistance to consolidation.

There are no clear answers about whether consolidation works. Among those consolidations which were realized (i.e., completed), the impact is very mixed. Even the evidence as to whether small municipalities should consolidate is not uniformly consistent in the literature.

The largest portion of the data that is available on consolidation is from the initiatives of other countries. They have undertaken more consolidations than have been attempted in the United States. However, the fact that the political situation and the cultural conditions are often so different is a major concern for attempting to arrive at recommendations that apply to New Jersey.
CONCLUSIONS

If the question is “Do we consolidate and where?”, the literature review shows there is not adequate information to say “yes” or “no,” and there are certainly not concrete criteria to follow through on a “yes” answer. The literature indicates that governments have achieved only a small portion of the attempted consolidations, and the results of those achieved are mixed.

- **Cost Savings Are Not Assured**
  
The literature does not consistently support the general belief that increasing the size of municipalities will lead to cost savings. The overall U-Shaped curve relationship between population size and costs per capita masks the details of size relationships that vary with the nature of the service being delivered.

- **Implementation of Consolidation Is Costly and Time Consuming**
  
  Transitional costs can be substantial if the consolidated government requires new facilities or infrastructure. It will normally take years to complete a consolidation. It is a complex task to achieve, as opposed to simply assuming a better organizational culture and better procedures in the merged government.

- **Savings Only Result from Reductions in Resources**
  
  There is a tendency to create a wage and benefit structure that rises to the highest wage levels of the pre-merged governments. The merger must be evaluated as to how positions, equipment, or facilities can be reduced, if not immediately, then in the long run, so that these savings will balance the costs of the transition. The on-going costs resulting from higher uniform service levels and wage and benefit structures among merged municipalities are another major consideration.

- **Most Consolidation Attempts Fail**
  
  Governments have not achieved the majority of recent voluntary attempts at consolidation. Of those that have been achieved, the results, measured in terms of costs savings or improved quality or responsiveness of service delivery, are mixed.

- **Politics Is an Obstacle**
  
  The literature most often cites political considerations, running the gamut from multiple concerns of the public to concerns of political parties about
shifts in the balance of power, as the most significant obstacles to consolidation

Evaluations of potential mergers must be specific to the needs and situations of the communities involved. The mere attempt to consolidate often focuses an evaluation on ways other than consolidation to achieve increased efficiencies, even when the merger of governments does not result. This “unintended consequence” has led to better arrangements for service delivery in many situations.
APPENDIX A -- ANNOTATED BIBLIOGRAPHY

Literature Review and Analysis Related to Municipal Government Consolidation

This commission report reviews the optimal structure of local government. The report declares that a multiplicity of general and special purpose governments contributes to democratic values and a coherent local public economy. The report distinguishes between the provision (that is, the determination of what) and the production (that is, the determination of how) of public goods and services.

This report is not available in the Articles Folder for the LUARCC project. It was referenced by another author as showing mixed results for economies of scale.

Although much of the reform literature and consolidation rhetoric suggests that consolidation is likely to save money or reduce taxes, the actual relationship between city/county consolidation and "efficiency" is an empirical question. The results of this case study show that city/county consolidation produced no measurable impact on the taxing and spending policies of one city that has consolidated - Jacksonville, Florida.

The twenty-first century will be one of rapid change and great need for institutional adaptability. Yet, in the critical area of the relationships among citizens, the civil community, and local governance, some provincial governments are imposing an intellectual fashion of the nineteenth century in the form of an almost religious faith in monolithic organizations and central control. This Commentary undertakes a comprehensive review of 50 years of evidence on the relationship between the structure and performance of local governments in metropolitan areas.

This book provides an introduction to "public choice" analysis of urban problems. The authors argue that a critical rethinking of the problem of urban government is vitally needed and long overdue. As a means to this new perspective, they offer the public choice approach, which takes as its starting point the diversity of individual preferences and the diverse nature of public goods and services. Bish and Ostrom analyze a number of studies that compare the traditional alternative of metropolitan consolidation with the public choice alternative of a dynamic mix of multi-level public and private services. This book is not available in the Articles Folder for LUARCC. It was referenced by another source.


Cooperation of neighboring local authorities in the provision of regional public goods can be efficiency enhancing due to economies of scale, a better realization of fiscal equivalence or dynamic efficiency gains. While the need for such cooperation between local authorities is undisputed, there are different positions concerning the form the cooperation should take. Some argue that local authority mergers are the most efficient and democratic strategy. Others argue that functional cooperation is more appropriate and that mergers reduce the welfare enhancing effects of competition between local authorities.


The debate in the UK on the reform of local government structure is poorly informed by empirical evidence. This article bridges part of the empirical gap by drawing upon analyses of structural effects in the USA. Two main dimensions of structure are outlined: fragmentation and concentration, both of which can vary vertically and horizontally. Fourteen structural hypotheses are identified and categorized as technical, competitive and political effects.


In November 2000, voters in the City of Louisville and Jefferson County approved a referendum to unify their two governments, effective January 2003. This report investigates the functions that are unaffected by the merger as well as evaluating departments whose fate has been left to the determination of the Metro Mayor and Council. Building on a superb body of local data collection and analysis, the document seeks to present the
new Regional City of Louisville with its first complete look at itself as it embarks on merger, in order to help it define a new vision of competitiveness. To that end, the report endeavors to provide a new map of the critical demographic, land use and economic trends altering the new city, and then follow up with an agenda of potential policy choices that will help the region shape the trends to its benefit.


The 1990s witnessed a major era of structural reform in Australian local government. Amalgamation programmes in all six states resulted in a substantial decrease in the number of local authorities in Australia. The chief rationale underlying local government mergers lay apparently in the belief that larger municipalities would exhibit greater economic efficiencies. Despite its widespread acceptance amongst policy elites, this argument did not derive from a solid empirical base. This article seeks to evaluate available research evidence on the controversial question of economies of scale in Australian local government.


The article discusses a city-county merger in Georgia. Two of the four successful consolidations in the United States since 1990 have occurred in Georgia: Athens-Clarke County (1991) and Augusta-Richmond County (1998). The authors studied the finances of the Unified Government of Athens-Clarke County which began operating in FY1992. They examined expenditures between 1990 and 1997 in order to examine both the short and long-term financial impacts of consolidation.


The authors present a model for estimating the cost of providing local government services, and then introduce the notion of the "optimal" size of a municipality. In this paper, they present an analytic framework for the geographic aggregation of municipalities into larger and more populous municipal districts in order to reduce the costs of providing public services. The model allows the authors to determine the optimal number of districts for a fixed population size in a given geographic area, and to arrive at the extent of cost savings possible in the absence of additional considerations.
Claps, M. (2008b). Mergers are the Ultimate Government Consolidation: Lessons Learned from Queensland. Gartner Industry Research, Gartner, Inc. Information Technology (IT) that runs day-to-day operations in municipalities usually has different IT structures, sometimes even different operating system platforms (e.g. Novell vs. Microsoft). This is a crucial factor to consider when planning mergers of local governments. Chief Information Officers or equivalents in municipalities need to consider some of the lessons learned from the state-mandated municipal mergers in the Queensland area of Australia.


This research project was an application of the first phase of the four phases Change Management Model, found in the Executive Management of Change course taught at the National Fire Academy. In Ada County, Idaho, various fire district chiefs had been discussing the possibilities of a fire district merger for some time; however the problem was that no formal analysis had taken place. The purpose of this research project was to do a formal analysis of this four fire district merger. Historical, descriptive and evaluative research methods were used to determine (a) what were the organizational conditions, including mission statements, standards, operational procedures or other values that would be impacted, (b) what were the potential destabilizing forces that may exist, (c) what would be the impact of organizational conditions or destabilizing forces, and (d) what the organizational change requirements necessary to make the merger successful would be.


Structural limitation and narrow managerial capacity have consistently hampered both an effective and efficient decision-making process in small rural governments. Due to small size and relative isolation, rural governments are inherently limited in developing either effective policy or efficient delivery systems. These structural barriers have prevented many rural public officials from developing the capacity, resources, and expertise needed for managing increasingly complex problems. This article provides a brief review of the performance measurement literature and suggests an alternative approach to assessing the efficiency of producing local public services. The proposed method seeks to incorporate microeconomic theory into the measurement process. The case of producing low-volume rural road services in the Midwest is examined to illustrate the method. The data used to study managerial efficiency in the production of rural road services were gathered from a mail survey of Illinois, Minnesota and Wisconsin township road officials.
and the 1982 Census of government. The sample contains 435 independent observations of Midwestern townships.


An analysis of size and managerial efficiency of northern New England towns in the production of rural road services is reported. A stochastic cost frontier was used as the normative efficiency reference set. Empirical results provide evidence of economies of size in the production of road service in New England and evidence that size inefficiencies are present. Results also suggest that managerial inefficiencies, or input use inefficiencies, are present and costs may be 40 percent higher than necessary. At issue is the effectiveness of current institutional arrangements: small town governments may best match local demand with services, but at high cost.


This report of the Australian government examines various structural reforms. Typically, economic approaches to local government performance improvements take one of two forms. In the 'conventional' view, large, hierarchical, multipurpose organizations are seen as the best way to organize local public services. This approach argues that in a 'consolidated' structure, all services are provided by a single unit that covers a wide geographical area. Economic arguments usually advanced in support of this view include economies of scale, economies of scope, administration and compliance costs (Dollery & Crase 2004). The 'public choice' perspective that has gained prominence in the last 40 years provides a sharply contrasting view. Proponents argue that efficiency and responsiveness are enhanced by local government structures that are based on markets and competition rather than on structural and administrative consolidation.


Structural reform chiefly through council amalgamation has long been the most favored means of enhancing municipal efficiency by Australian state government policy makers. However, the disappointing results of most amalgamation programs have led to a growing skepticism in the local government community and a search for alternative methods of improving council efficiency. Not only have scholars designed generic models suitable for Australian conditions, but individual councils and group of
councils around the country have also developed several de facto alternatives to amalgamation. An embryonic body of research has now begun to examine the efficacy of these alternative organizational arrangements. The present paper seeks to augment this nascent literature evaluating the outcomes achieved by Walkerville; an Adelaide suburban council that escaped the South Australian merger program completed in 1998.


Broad consensus exists in Australian policy circles on the need to enhance the efficiency of local government. However, the question of the most appropriate model for local governance remains controversial. Quite apart from larger amalgamated municipalities, a range of promising alternative options can be identified that may be able to effectively combine more efficient service delivery with vibrant local democracy.


This article presents the results of a detailed study of potential cost savings from consolidation of New York school districts. It extends past research on consolidation by developing a theoretical framework which distinguishes several dimensions of economies of scale and defines an empirical cost function for schooling. While findings apply directly to New York, the method developed here has general relevance to state education policy by helping to target candidate school districts for consolidation, and, where consolidation is not feasible, adjusting state aid formulae to reflect more accurately the cost impacts of scale.


This newspaper article presents some cost savings estimates from a study by MGT of America evaluating the consolidation of county and city fire departments in Pinellas County, Florida. This report was presented to the County's Charter Review Commission. MGT recommended that the county form a single fire district.


It is almost axiomatic that local governmental institutions, if they are to cope successfully with the problems of urbanization, require extensive reform. For many services, greater decentralization seems in order. For others, such as transportation planning, effective metropolitan government would be desirable. However, proposals which fail to recognize the impact...
of institutional change on redistribution, as well as on allocative efficiency, risk irrelevance. Successful reform requires a greater understanding of the nature of local government in an urban environment. The model presented in this paper, though an extreme simplification of reality, is offered as a step toward providing that understanding.


This newspaper article reports on the presentation of the annual audit in North Redington Beach, Florida. The audit showed $100,000 in savings for eliminating the police department, but it appeared eliminating the fire department did not represent a cost savings, since the cost of using the Indian Rocks Fire District is about the same. In the next year, this cost will be removed from the town budget and will be billed directly to the resident through the county tax bill.


In their essay "When Efficiency Is Unbelievable: Normative Lessons from 30 Years of City-County Consolidations," published in the July/August 2005 issue of PAR, Leland and Thurmaier make an important contribution to understanding how city-county consolidation occurs. They revise the widely accepted Rosenbaum and Kammerer model of consolidation and posit that "strong arguments" based on economic development, especially in the absence of organized opposition, led to victory for consolidation advocates. In this response, the authors argue that efforts to identify a set of arguments or charter provisions that will lead to successful consolidation are misguided. The real story in consolidation campaigns is how participants use heresitetical arguments in an effort to turn their opponents into political losers. What makes arguments strong or weak is not their substantive policy focus, but how they are structured.


This newspaper article demonstrates the difficulties of consolidation in the real experience of Pelham Manor and the Village of Pelham in New York. A village trustee cited fear of loss of services as the reason for failure to consolidate and the Mayor suggested an additional factor was the unequal property valuation in the two towns, which would lead to potential tax increases for some residents even if total costs went down.

Local government size varies dramatically around the world. In Sudan, Côte d'Ivoire and the United Kingdom municipalities average more than 125,000 people. Those in many European countries have less than 10,000 people. Countries often consider consolidation of local governments as a means to lower service delivery costs, improve service quality, enhance accountability, improve equity or expand participation in government. The paper reviews a number of theoretical arguments and empirical findings concerning the size of sub-national governments. Countries should not presume that amalgamation will solve the problems because benefits and costs are situation specific. Success depends on many factors including getting incentives right for the various players and managing the transition properly. The effects on costs must be examined in terms of all changes occurring with consolidation, including geographic size.


Previous studies have yielded somewhat different conclusions as to the effect of population size on city per capita expenditures. The analysis in this article was motivated not only by the differing conclusions, but also by the increased concern expressed by policy-makers with the effects of population growth and redistribution on urban areas in general and cities in particular. This article attempts to assess the effects of three population factors -- size, density, and rate of change -- on the provision of certain public services.


The author goes into detail about calls for municipal mergers from many states including New Jersey, New York, Ohio. "The result is a tense debate between states and localities over just what local government should look like. " The article notes the fragmentation of government in several different states. The article is weak on substance when it comes to outlining actual consolidation. Its strength is that it outlines some of the issues as seen by practitioners in government, and in doing so, gives an introduction to the obstacles to consolidation.


This study examines the effects of both whole-grade sharing and administrative consolidations of local school districts in Iowa in the 1990s, the majority of which were induced by state fiscal incentives. The study finds no effects of either sharing or consolidation on the pupil-teacher ratio, enrollments, or dropout rates. Although the study lacks detailed
quality data on student outcomes, the findings suggest an absence of efficiency gains from either whole-grade sharing or consolidation.

Grant, K. (2007). How Toronto has fared as one big city; 10 Years Old Jan. 1; Despite growing pains, there have been successes. National Post. Toronto: 1. This news article looks at the successes and issues that have appeared since the consolidation of six cities into Metro Toronto ten years prior. Although the expected cost savings did not materialize, other benefits in terms of the ability to make decisions and accomplish change did occur. The author notes that much consolidation of services had already occurred prior to the final merger.

Greenblatt, A. (2006). Little Mergers on the Prairie. Governing Magazine. This article examines how Iowa has addressed the concern that it has more government than it now needs. Iowa has 3,000 cities and towns, 99 counties as well as special districts. The Governor proposed to replace all local governments with 15 regional governments. With a stagnant tax base, Iowa has few options. The Governor's proposal was met with resistance, but, on a positive note, Iowa municipalities are working more together. "For local officials, saving a lot of money right away isn't as great a concern as doing things more efficiently when they can, whether that means streamlining internally or reaching out to new partners."

Hanes, N. (2001). Amalgamation Impact on Local Public Expenditures in Sweden. 6th Nordic Conference on Local Public Finance. Helsinki. Two extensive municipal reforms have substantially reduced the number of municipalities in Sweden. The main objective of the first municipal reform in 1952 was to form municipalities with no less than 2,000 inhabitants in order to increase administration efficiency and to exploit economies of scale in the provision of local public services. This paper studies whether the growth in local public expenditures differed between the newly formed municipalities and the ones that were not affected by the reform. The empirical analysis is based on data for the years 1951, 1953 and 1959.

Hirsch, W. (1959). "Expenditure Implications of Metropolitan Growth and Consolidation." The Review of Economics and Statistics 41(3): 232-241. Metropolitan areas are growing fast and so are their problems. To make this growth smoother and fiscal problems less burdensome, the consolidation of metropolitan area governments is widely advocated on the premise that it will reduce per capita expenditures of local government services. It is argued that, just as there are economies of scale in manufacturing, average municipal costs and expenditures likewise decline as the size of the local government unit increases. This paper will attempt to develop a theoretical framework for analyzing the question "What are the likely expenditure effects of metropolitan growth and consolidation?"
The deductive answers will then be tested by an empirical analysis of 149 government units in the St. Louis metropolitan area and some Massachusetts cities.


This book is not available in the Articles Folder of the LUARCC project. The chapter was referenced by another author as showing mixed results about economies of scale.


This Powerpoint presentation reviews consolidation attempts since 1805 in the United States, with particular attention to those attempted since 1990. It examines the efficiency argument for consolidation and evaluates other benefits that may accrue from consolidation.


Local governments in Monroe County are caught in the convergence of several trends that are producing current and projected multi-million dollar budget deficits in the two largest governments - the city and the county - and have strained town, village and school district budgets as well. These trends are (1) the rising cost of government at all levels; (2) a stagnating local economy; and (3) high local taxes. The primary objective of this report was "To inform and update the public about opportunities to make government more effective and efficient through cooperation, collaboration, and/or consolidation."


This book provides a history of how New Jersey developed into a state with 566 towns. It elaborates on the various reasons for secession over the years. The author admits that the reasons are sometimes hard to document because they happened so long ago, but the treatise of the book is that many of these justifications are no longer appropriate today. Karcher examines reasons for changing the current situation and proposes solutions based on his knowledge and experience as a state legislator. This book is not available as full-text in the articles file for the LUARCC project.


This article reviews the literature on size and evaluates the effectiveness of consolidations. The article begins by stating that fragmentation is
usually assumed to be inefficient, but remarks that there is a growing body of evidence indicating that this conventional wisdom may not always be true. It compares the arguments for and against consolidation and reviews some of the research and case studies. The article suggests alternatives to consolidation that may provide alternative paths to efficiency.

This news article discusses the debate in Spring Hill, Florida over the consolidation of the fire and rescue service into the operation of Hernando County. The costs will go up for those with less valuable properties, but down for those who own more valuable properties, because the county rate is a flat fee, not a rate based on the property valuation. The debate also centers around the differences in the operations of the the county and the Spring Hill services.

Koven, S. G., and Don F. Hadwiger (1992). "Consolidation of Rural Service Delivery." Public Productivity & Management Review 15(3 (Spring)): 315-328. The efficiency of rural counties in Iowa varying in size is evaluated and potential structural changes are reviewed with those findings considered. In particular, the decline of both population and revenue in counties in rural Iowa is seen as pushing the need for a structural change such as consolidation. The article also discusses obstacles to consolidation that are associated with a rural environment.

The study employs a quasi-experimental design to assess the operational costs and benefits of a consolidated department. It uses a comparison group consisting of eight police departments in a contiguous county in rural Pennsylvania to compare the outcome variables. Northern York County Police Department, the experimental group, consolidated in 1972.

The book has 14 detailed case studies about city-county consolidations in the United States from 1967-1999. Most were unsuccessful or it took several tries. The book focuses on "what factors affect the outcome of an effort to consolidate two local governments?" The full-text of this book is not available for the LUARCC project.

The authors use a new model of city-county consolidation to analyze 12 local government consolidation attempts during the last three decades. Using a rigorously designed comparative case study, they identify the critical variables that explain why some consolidations succeed and others fail. Arguments for consolidation typically fail when they focus on the increased equity to be gained from the redistribution of revenues from the suburbs to central cities. Traditional arguments that are based on increased efficiency are also unsuccessful. Instead, the essential element of a successful consolidation is a group of civic elites who define the economic development vision for the community, determine that the existing political structure is incapable of supporting and implementing that vision, and convince the voters that city-county consolidation is the key to economic development.


The most persuasive argument in favor of city-county consolidation has been -- and remains -- economic development through the formation of a strong and attractive regional community identity. Empirical evidence consistently demonstrates that appeals to voters based on reducing inner-city/suburban socioeconomic inequity and enhancing administrative efficiency are a recipe for failed consolidation campaigns.


This paper describes the causes and consequences of post-war municipal amalgamations in Japan. It shows that recent amalgamations have been inspired in part by the desire to ensure that municipalities thus formed had sufficient capacity to deliver important public services in such areas as education, sanitation and welfare. It notes that there may be cost-efficiency gains associated with amalgamation in that the costs of delivering public services in Japan appear to be lower for larger municipalities (up to a point). Furthermore, case studies of some prefectures show that voter turnout in elections is not significantly affected by amalgamations.
This paper is about the current thinking in metropolitan governance in Jordan. In 1985, a number municipalities and village councils around Amman City were amalgamated to form what is known today as the Greater Amman Municipality. Since its inception, creating a metropolitan authority in Greater Amman was presented as a solution to a technical problem, the multiplicity of administrative units. Although one cannot connect the assumed success of this new municipality to this process of amalgamation, it is often described as such. Accordingly, amalgamation is presented in Jordan as a solution to the problem of governance in metropolitan areas. Greater Amman became a model for good governance. Steps toward implementing this model around other major cities were taken recently. This paper presents the rhetoric that produced such conclusions and argues that the idea of a unified metropolitan authority is rather a “practice” that preceded the existence of the problem.


The article does not discuss cost efficiency in consolidation. It focuses discussion and analysis upon five aspects related to consolidation: (1) the relationship between reform as a process and adoption of consolidation; (2) the regional patterns of consolidation attempts and adoption; (3) certain political and administrative characteristics of charters which are associated with reform; (4) the relationship between referenda and adoption; and (5) future reform options including the role of state government on issues of metropolitan reorganization.


Onondaga County in New York State investigated: 1) the experiences of municipalities around the country in their successful attempts at intergovernmental consolidation and cooperation, 2) data on expenditure and dedicated personnel by municipality in Onondaga County, 3) assessment of applicability of efforts in other parts of the country to Onondaga County, and 4) functional areas in the 36 municipal governments in the county that may lend themselves to cooperation and/or consolidation. This article summarizes what has been happening in Onondaga County, New York with regards to many types of municipal reform efforts including shared services and consolidation.

The Nova Scotia government amalgamated the Town of Bedford, the cities of Dartmouth and Halifax and Halifax County to create the Halifax Regional Municipality. The Halifax amalgamation is one in a series of such mergers that have happened recently in Ontario, Quebec and the Atlantic Provinces. This study compares the costs, resources, service levels, crime rates, workloads and citizen perceptions of police services before and after amalgamation. Claims about the efficiency and cost-effectiveness of amalgamations have tended to rest on evidence that is generally inadequate to assess the actual consequences of this kind of organizational change. The current study suggests that when predictions are tested, there is a considerable gap between the rhetoric and what actually happens when police departments are amalgamated in an urban setting.


The differing perspectives of decision makers in newly-amalgamated municipalities may hinder the reduction of costs or introduction of efficient organizational change. The author discusses the need to address and accept differences, a process that may be essential, at least initially, to achieving efficiencies. Additionally, the author discusses the amalgamation process and the nature of the change process itself. During amalgamation the pursuit of uniformity of services in combination with a weak and/or chaotic change process (lack of committee structure, poor information, vague deadlines, shifting relationships and assertion of power) may undermine efforts to obtain efficiencies.


An interrupted time-series quasi-experiment is employed to test the basic hypothesis that reformed cities (with city manager, at-large elections, and nonpartisan ballots) tax and spend less than unreformed communities. Eleven cities with populations of 25,000 and above which significantly changed their political structure between 1948 and 1973 are compared with 11 matched control cities that made no changes. They found that over an 11-year period, variations in fiscal behavior were virtually unaffected by changes in city government structure.

Mower, J. (2003). City-County Consolidation and Other Regional Approaches to Reorganizing Local Government: Lessons Learned from Examples and Experts. This memo, an informal but comprehensive document prepared for the City of Syracuse, includes a selection of lists, charts, and excerpts from research conducted related to municipal mergers in varying metropolitan
statistical areas (MSAs). The author summarizes the latest city-county merger of Louisville, Kentucky and summarizes case studies from several other MSAs. Substantive lists of the “easiest” and “hardest” methods of providing shared services are included, and reasons for failure or success of municipal mergers are noted.

This New York State 2008 Shared Services Annual Report, summarizing the implementation of the first three years (2005 - 2007) of the Shared Services program at the Department of State. This program consists of both technical and financial assistance to New York’s municipalities. One component of this program has been the Shared Municipal Services Incentive (SMSI) grant program. SMSI provides incentive grants in five funding areas: shared municipal services, shared highway service, county-side shared service, local health insurance, and local consolidation. Of the $25 million for the year’s program, $10 million is dedicated to 25% increases in aid for municipalities that consolidate.

The author is concerned with the call for municipal reform based on untested theories. In particular, the assertion that the number of police jurisdictions should be curtailed in favor of larger police departments has no support from the evidence. The article summarizes empirical studies on the impact of size on efficiency of government services, particularly police services

This article presents a case for smaller local governments based on notions of economic efficiency, community identity, service responsiveness, and political accountability. The arguments of skeptics (or those favoring greater council amalgamations) are challenged and refuted. The answer is to break up metropolitan councils into smaller political units and amalgamate their back offices into contestable shared service centers.

This newspaper article reports the perspectives of New Jersey state legislators, state officials, local mayors, and municipal consultants when they were meeting at the 2007 New Jersey League of Municipalities convention. The focus of the article is on the debate about consolidation - whether it will produce the cost savings its proponents claim.

The 1999 Halifax Regional Municipality (HRM) Citizen Survey is used here to study citizen responses to a municipal amalgamation that created the Halifax Regional Municipality. The analysis of this survey brings forward citizen-based assessments of the amalgamation decision and subsequent municipal governance. Questionnaire items are used to create measures of citizens' views concerning amalgamation, the relationship between the urban and rural spaces of the new municipality, the performance of the HRM political leadership and the impact of amalgamation on municipal services. There are two key research questions. How did HRM citizens assess amalgamation after three years of experience? What factors best explain citizens' views towards amalgamation? The political and policy context of the amalgamation decision taken unilaterally by the Nova Scotia provincial government is briefly described.


This report from Queensland, Australia followed the announcement in April 2007 that a review of Local Governments in Queensland will be undertaken to assess whether there is potential for the amalgamation of councils or the realignment of council boundaries in some circumstances. The purpose of this report is to identify a range of criteria in a broad economic cost-benefit analysis framework to: identify the different costs and benefits that may be associated with amalgamation options; identify the key criteria that should be used to assess amalgamation options; and identify criteria that might indicate where amalgamations are not viable.


This case explores the consolidation of 12 municipalities in the Ottawa-Carleton region of Ontario, Canada based on case study interviews before and immediately after consolidation and a variety of government documents. The study analyzes whether top-down, or mandated, consolidations can produce a long-term successful implementation. It addresses questions related to motivation, goals, the new structure, effects on public employees, immediate impacts on service quantity and quality, short-term cost savings, and changes in local power structure.


This article describes the successful UniGov program, uniting the city of Indianapolis and Marion County in central Indiana and outlines "lessons
learned" for other communities considering such a consolidation effort. Through this consolidation, the city of Indianapolis was transformed from what was described by its chamber of commerce in the 1970s as "a cemetery with lights," into a destination for those seeking a vibrant downtown area and a major sports center, as well as the nation's 12th largest city by the 1990s. Indianapolis was one of the three major consolidation or merger experiences in the 1960s and 1970s. Indianapolis's specific contribution to the experiment in governance models was a city-county consolidation program that concentrated a limited or select group of urban services at the regional (defined as county) level while permitting most other critical urban services to be delivered by administrations and agencies serving different, often much smaller, areas within the county.


Evaluating the effects of a change in public policy setting is a critical element in the chain of accountability. Factors such as effectiveness and efficiency in government operations are often difficult to measure. In this study of efficiency outcomes, the authors follow events before and after significant structural change arising from local authority amalgamation. The study focuses on highway maintenance and uses Data Envelopment Analysis (DEA) to evaluate whether greater efficiency was achieved. Results (confined to highway management activities) show no evidence that amalgamation was justified in terms of diseconomies arising from smallness (i.e. increasing returns to scale). While new governance practices introduced contemporaneously lifted the level of performance of local authorities in terms of higher technical efficiency, there is no evidence that the amalgamation policy contributed to this improvement. The policy impact evaluation methodology developed in this paper has potential for application to other local government service activities.


Notwithstanding a lack of interest by cost-cutting governments in Britain and the United States, municipal consolidation has emerged in at least three Canadian provinces - New Brunswick, Nova Scotia and Ontario - as a significant government priority. There is no academic evidence to suggest that consolidation produces savings. This article examines the various studies that have accompanied the consolidation efforts in the three provinces and finds them inadequate and flawed. Government reports in New Brunswick have tended to point more to non-financial benefits from consolidation, but the creation of the single-tier Halifax Regional Municipality in Nova Scotia has been justified primarily in terms
of projected cost savings. In Ontario, the "Common Sense Revolution" commits the government to reducing overlap and duplication but not necessarily to consolidation. A ministry study of one Ontario municipal amalgamation purports to demonstrate savings, but the conclusions are questionable. The report of the task force on the Greater Toronto Area is significant because it specifically rejects claims that lower-tier amalgamations will save money and because it points to the benefits of municipal competition. Reducing the number of municipal governments does not necessarily mean less government.


Drastic change was contemplated by The Common Sense Revolution (CSR), the election manifesto that brought Mike Harris to power as premier of Ontario in 1995; the Harris government implemented drastic change; therefore the CSR explains what the Harris government has done. The fact that this syllogism is logically flawed should be obvious. The aim of this paper, however, is to go beyond formal logic and show that, with respect to the Harris-government's municipal policies, its substance is flawed as well.


As the previous discussion has shown, it is quite possible for a single urban area to evolve in such a way that it contains many separate municipalities. Adjoining rural municipalities might have become urban over time; new urban municipalities might have been established within a former part of a rural municipality; two previously distinct urban areas might have grown into each other; or all or some of these processes might have occurred simultaneously. Ever since the mid-nineteenth century, there have been politicians, civil servants, academics, and sometimes even real-estate developers who have observed such phenomena with growing concern. They began to refer to the increasing number of municipalities within a single urban area as "fragmentation." This article discusses the need for redrawing municipal boundaries, particularly in light of different demands for service in rural and urban communities.


The new regionalism in the United States emerged because the old regionalism proved politically impossible to implement. For Canadian cities, however, provincial legislatures frequently imposed various institutional reforms of the type favored by the old regionalists. The first section of this article points out what it is that American new regionalists and Canadian policy-makers should have learned from the results of the
old regionalism as it was implemented in Canada. The second section examines the relevance of the new regionalism for Canada. For those who still accept the tenets of the old regionalism, the new variety will seem irrelevant, if not counterproductive. But, for others, the new regionalism will provide a new perspective for analyzing old Canadian problems. The article’s third section shows that, in some respects, Canadian cities have already gone further in implementing new regionalist principles than most American and Canadian analysts have recognized. The relevant institutions that are examined briefly in this section are the Greater Vancouver Regional District (GVRD), the Greater Toronto Services Board (GTSB), and the Montreal Metropolitan Community (MMC).

The first part of this article explores the historical background to municipal amalgamation. The second looks at what has been happening in the United States. The third briefly describes the recent Canadian amalgamations and the conclusion examines their potential impacts. Since the early 1990s, municipal amalgamations have taken place within the following major Canadian cities: Sydney and Halifax in Nova Scotia; Toronto, Ottawa, Hamilton, and Sudbury in Ontario; and Montreal, Quebec City, Hull, and Longueuil in Quebec. The temptation is to assume that, like so many other changes in public policy in this period, such amalgamations are simply part of a worldwide trend relating to neo-conservatism, globalization, and/or the apparent victory of capitalism over socialism. Nothing could be further from the truth. With the exception of controversial municipal amalgamations in Melbourne, Australia and in post-apartheid South Africa, it is only in Canada, among western developed nations, that municipal amalgamations have recently been high on the policy agenda.

Sancton, A. (2005). "The Governance of Metropolitan Areas in Canada." Public Administration and Development 25: 317-327. This article briefly examines five significant Canadian developments with respect to the governance of metropolitan areas: annexations and mergers such that there is one main municipal government for the metropolitan area, two-tier metropolitan government, the amalgamation of two-tier metropolitan systems into a single municipality, demergers in Quebec, and the creation of flexible and innovative entities for metropolitan governance. Special attention is paid to the Greater Toronto Area, a continuous built-up urban area that transcends at least three metropolitan areas as defined by Statistics Canada. In the absence of any authority covering the entire metropolitan area, it now appears that the Ontario provincial government is becoming the key policy maker. As an example of a flexible and innovative form of metropolitan governance, the Greater Vancouver Regional District merits attention elsewhere in the world. Canada’s experiences with so many different institutional
arrangements in recent years means that there is much to be learnt from their obvious failures and occasional successes.

This article discusses the proposed merging of the Vermont municipalities of the Town of Essex and the Village of Essex Junction as a way to revitalize local representation in government. The two entities already share a town selectboard, but the town outnumbers the village in population, which causes taxation without representation for the villagers and voter apathy in both municipalities. Alternative voting systems are analyzed, most notably Proportional Voting. The author warns that unless an alternative voting system, as used in other U.S. municipalities, is implemented, the gains made by efficiency will be impeded by loss of equity. Rushing to consolidate two municipalities can cause loss of representation for neighborhoods and other minority groups.

The Article describes findings of a study made of the local governments in Milwaukee county to test the assumption that population size is unrelated to per capita municipal expenditures even when service levels are considered. Comparing 19 cities, they found that the use of per capita municipal expenditures shows only that one city is spending more or less than another, it tells nothing about either the quantity or quality of service that the respective public receives.

Sewell, J. (2000). Mega-problems in Toronto: The forced amalgamation of one regional and six local municipalities in metro Toronto has brought cuts in services, higher costs and reduced public access to decision-makers. The Gazette
This Op-Ed editorial was written by a former Mayor of Toronto and is quite passionate about the negative implications of the consolidation. Because of the intimate knowledge, some of the changes are put into the perspective of what was already in place and not a result of the consolidation. In addition, the loss of managerial and analytic capacity provides a perspective that would not be easy for an outsider to attain. Although the author has reason for a biased interest in the events, the inside perspective of what is important to evaluate is illuminating and the overall results are supported by other authors without a personal interest.

This newspaper article reports on the discussions about pursuing the annexation of West Oldsmar in Pinellas County, Florida. The article reported no debate on the value to both municipalities. The only issue
was a legal requirement about the total percentage of land in the municipality that must be owned by registered voters in order to hold a valid referendum for annexation.


This paper examines different models of governing structure found in metropolitan areas around the world. It evaluates how well these models achieve the coordination of service delivery over the entire metropolitan area as well as the extent to which they result in the equitable sharing of costs of services. Based on theory and case studies from numerous cities in developed and less developed countries, the paper concludes that there is no "one size fits all" model of metropolitan governance.


Local government in Norway comprises a large number of small municipalities. Cost efficiency can be improved by consolidating local authorities, and central government has designed a framework to stimulate voluntary mergers. Existing theories suggest that political transaction costs will impede consolidations. The author offers an explicit test of several efficiency and cost propositions based on data for Norwegian local government.


This article examines the results of the 2004 Quebec referenda on the mergers of municipalities to analyze the determinants of citizen preferences regarding municipal consolidation and fragmentation. The core hypotheses of the authors' empirical model are generated from the economic theory of optimal jurisdictional size. Holding constant the influences of language and of a unit's share of the merged population, the authors find voters are more likely to support de-merger when they expect that the merged unit will display a different public expenditure level than that of the municipality in which they reside. They also find support for de-merger is less when voters expect de-merger to increase the tax price of local public services.

This newspaper article reviews Alan Karcher's then forthcoming book "Multiple Municipal Madness". Opinions of academicians about the statements in the book and the perspective of the book are included in the article. The book discusses the number of municipal governments in New Jersey and expresses a need to consolidate them into fewer units.


Three municipal amalgamations in three different Canadian provinces are analyzed and compared in this article. There is little evidence to show substantial cost savings from the merging of larger government units. Smaller entities studied in this article have realized financial benefits, while some larger jurisdictions that merge experience diseconomies of scale; higher wages resulting from a more specialized, professionalized bureaucracy; and the tendency to move to higher service standards. The authors conclude that consolidation will depend on the history of inter-municipal cooperation, financial arrangements, collective agreements, political structure, spatial organization, and political will to amalgamate.


This article examines the transition and short-term effects of municipal consolidation on five recently amalgamated municipalities in Canada. The data for this study were collected from provincial and municipal legislations, tax rate by-laws and finance reports, as well as surveys and interviews with a variety of municipal officials and mayors. The analysis shows that municipal consolidation involves a complex reorganization of intricate administrative and political structures. Many of the problems encountered, and successes achieved, were particular to the circumstances of the municipalities that amalgamated. Ultimately, the success of consolidation in achieving greater efficiency and effectiveness in governance and service delivery will depend on the distinct history, as well as the spatial and economic circumstances, of the region considering reform. The five case studies, however, provide some useful lessons on how to improve the success of consolidations.
APPENDIX B
METHODOLOGY

SPPA employed a methodology for the literature reviews that consisted of thorough searches in all of the major databases representing social and policy journals. In consultations with SPAA faculty, the research associates used the knowledge from the early stages of the research to refine and expand the search, as was appropriate. SPAA created or used the following tools to assure we accomplished the aims of the Commission:

- LUARCC questions from the RFP
- Bibliographic databases
- Search terms specific to each report
- Reference database
- Annotated bibliographies
- Articles/web resources

In the first phase of the basic strategy, SPAA devised appropriate search terms and used them to search all the relevant bibliographic databases. Promising articles were recorded as citations in the reference database (EndNote®) and the full-text article content was saved to the article file (as a PDF).

In the second phase of the search, research associates assigned to the project thoroughly examined the articles for findings that addressed LUARCC’s questions. The research associates recorded each finding in the reference database, attaching it to the question it addressed and evaluating the degree to which the article or information resource substantiated the finding. The research associates completed this substantiation, weeding out articles based solely on ideology and rating the remaining articles according to the amount of evidence or the concreteness of the argument presented. During this process, team members reported any new search terms or resources they encountered to the project librarian and project director. Subsequent searches utilized this additional information.

The supervising faculty member assigned to this project and the project director reviewed the results of the first phase of the search, which found the potential articles. When necessary, they redirected the search to clarify information or find new sources. In addition, the faculty members and project director reviewed each finding for relevance to the LUARCC questions.

SPAA sought LUARCC’s input through the review of an outline of the proposed methodology to ensure that the literature search was comprehensive and focused on the questions LUARCC raised. Because of the iterative process used in the information review, the early results of our search enhanced the project tools further.
LUARCC Questions

SPAA extracted the questions from the LUARCC RFP into a spreadsheet and distributed it to all team members assigned to the project. The research team coded each of these questions with a Question ID, using the listing in the spreadsheet. This allowed the research associate to link a finding from an article to the question it addressed using the abbreviated Question ID. The questions and Question ID are in the appendix.

Bibliographic Databases

The Bibliographic Database appendix lists all the literature and news databases and other information resources, such as websites and books that SPAA used to find relevant information for LUARCC. The researchers and the project librarian knew certain resources were more comprehensive and relevant for this project. SPAA focused on Lexis/Nexis Academic as a resource for periodicals, including newspaper articles, journal articles, and legal documents; Academic Search Premier as the best resource for academic journals; Business Source Premier as a similar resource; and Public Affairs Information Service for government reports, monographs, and articles.

Search Terms

The search within the bibliographic databases and in other resources used the following terms:

- Consolidation
- Merger
- Amalgamation
- Dissolution
- Unification
- Annexation
- Acquisition
- Integration
- Spillover
- Diseconomy

The searches always used the following additional governmental terms as limiters:

- Municipality
- Local government
- Borough
- Village
- Town
- Township
- City
- County
- State
Since the search engines differ in their filter capabilities (and the Boolean logic which drives some of them), the research associates used their familiarity with literature searches to make efficient search decisions. They focused on North American articles, cross-cultural studies that included the United States, or other articles, despite their geographic origins, if they were applicable to the subjects the Commission wanted to investigate in a New Jersey context.

Winnowing the search results while casting a broad enough net is not always easy, and never automatic, as our preliminary analysis showed. The research associates, with faculty guidance, used their expertise in the content area they investigated and their experience with literature reviews as doctoral students to make the searches practical and the results comprehensive and responsive.

Reference Database – EndNote®

SPAA summarized the important information from the articles and reports found in the literature searches in EndNote®, a high-quality bibliographic software program by Thompson Reuters. As part of its work products, SPAA will provide a copy of EndNote® to LUARCC with the on-line annotated bibliography for all five projects it completed. A printed copy of the annotated bibliography for this project is Appendix A to this report.

The findings are the core of the reference database and of this project. The findings contain a brief extract from the article or a summary of a key point that links the article to LUARCC’s questions. The following information is contained with the findings to provide a quick review:

- **Question ID** – this will contain a project designation and identify the specific question addressed
- **Finding** – a brief description of the finding, conclusion or discussion
- **Cases** – if it is based on an empirical study, the number of cases that support the finding
- **Basis** – reviewer’s evaluation of the substantiation of the finding in the source on a 0 to 4 scale. If there is no basis, it is rated a 0; poor evidence, a 1; some evidence, 2; well substantiated, 3; considered a fact, 4
- **Unit** – the government unit or region cited in the finding

It is not necessary to use EndNote® to make the most of the project completed by SPAA. Rather, the working details contained in EndNote® are there to support this report.

Library of Documents

Each article, or an appropriate extract from the article, report, book excerpt or other research document, has been stored and will be accessible in a separate file as a Word Document or PDF. LUARCC will be able to link to it from the EndNote® reference database that SPAA will provide as a final work product. It will contain the full text of
appropriate parts of the information sources found. Hence, it will allow LUARCC or its staff to review the original information that SPAA has summarized, allowing the Commissioners to be confident about their decisions as LUARCC goes forward.

Preparing the Final Report

SPAA used the findings in the EndNote® annotated bibliography to organize the report for each project around the questions initially specified by LUARCC in the original RFP. In preparing the report, the faculty and project director reviewed the findings, interacted with the research associates who had found and read the articles, and, when warranted to resolve any ambiguity, read the original texts. This final review generated SPAA’s conclusions in this report. In addition to this report, SPAA will provide an overall summary report for all five projects it completed.
## APPENDIX C

### RFP QUESTIONS

<table>
<thead>
<tr>
<th>RFP Question</th>
<th>Question ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does municipal consolidation result in more cost-efficient government?</td>
<td>CO</td>
</tr>
<tr>
<td>Does formation of larger political jurisdictions result in greater cost-efficiency of service delivery?</td>
<td>CO1</td>
</tr>
<tr>
<td>If cost is not a factor, are there other benefits of consolidation and what are they?</td>
<td>CO2</td>
</tr>
<tr>
<td>Are there specific instances where consolidation is beneficial and other situations in which it is not justified from the standpoint of efficiency, equity or other criteria? Describe circumstances.</td>
<td>CO3</td>
</tr>
<tr>
<td>Are there are identified or identifiable diseconomies associated with municipal consolidation?</td>
<td>CO4</td>
</tr>
<tr>
<td>What are the lessons learned based on consolidations that were implemented?</td>
<td>CO5</td>
</tr>
<tr>
<td>Are there cost savings associated with consolidations?</td>
<td>CO6</td>
</tr>
<tr>
<td>Are there hidden or other costs associated with consolidation that led to a failure to consolidate?</td>
<td>CO7</td>
</tr>
<tr>
<td>Are there other obstacles to consolidation which were commonly identified in multiple situations?</td>
<td>CO8</td>
</tr>
<tr>
<td>Are there any legislative impediments which were identified in the literature that were viewed as obstacles?</td>
<td>CO9</td>
</tr>
<tr>
<td>Are there any thresholds beyond which consolidation became less cost-efficient?</td>
<td>CO10</td>
</tr>
</tbody>
</table>
APPENDIX D

BIBLIOGRAPHIC DATABASES

Academic Search Premier
Books in Print with Reviews
Business Source Premier
Catalog of U.S. Government Publications
Conference Board Research Collection
CQ Researcher
Eagleton Poll Archive
Factiva
Gartner Research
GPO Access
Historical Statistics of the United States: Millennial Edition
Human Population & Natural Resource Management
Index to Legal Periodicals Full Text
Investext Plus
Lexis/Nexis Academic
Lexis/Nexis Statistical
National Technical Information Service
New York Times
Public Affairs Information Service - International and Archive
SA ePublications Social Science & Humanities Collection
Social Sciences Full Text
Statistics Canada's E-STAT
TV-NewsSearch: The Database of the Vanderbilt Television News Archive
Value Line Research Center
Wilson OmniFile Full Text, Mega Edition
Worldwide Political Science Abstracts

Other Information Sources

Research and Information Resources for Public Administration (2003)
Using the Political Science and Government Literature (Pub date, 8/09)
Public Performance and Management Review (ISSN 1530-9576)
http://spaa.newark.rutgers.edu/sharedservice.html
SPAA's Public Performance and Reporting Network
# Table of Contents

**Literature Review and Analysis Related to Costs and Benefits of Service Delivery Consolidation among Municipalities**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Executive Summary</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Purpose of the Report</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Review and Synthesis of the Literature</strong></td>
<td>8</td>
</tr>
<tr>
<td><strong>Comments on the Literature</strong></td>
<td>18</td>
</tr>
<tr>
<td><strong>Conclusions</strong></td>
<td>19</td>
</tr>
<tr>
<td><strong>Appendix A – Annotated Bibliography</strong></td>
<td>21</td>
</tr>
<tr>
<td><strong>Appendix B – Methodology</strong></td>
<td>38</td>
</tr>
<tr>
<td><strong>Appendix C – RFP Questions</strong></td>
<td>42</td>
</tr>
<tr>
<td><strong>Appendix D – Bibliographic Databases</strong></td>
<td>43</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus in October of 2008 to conduct a review of the literature on service delivery consolidations. The literature reflects the fact that service consolidations, primarily through the mechanism of shared services, are the most common form of service delivery other than the direct delivery of service by municipalities.

Shared services (and inter-local contracting) are successful tools to increase efficiency of local government service delivery and are the subject of this report. The companion report on Optimal Service Delivery Arrangements and Efficiency discusses centralized services (for example, the delivery of a service by a county for all its constituent local governments) and local or regional special districts (for example, utility authorities and fire districts). The literature on consolidated service delivery yields the following major findings:

- Quality of service delivery is an important factor in implementing cooperative agreements. Because the literature can state cost savings more concretely, it emphasizes cost savings in describing successes.

- Sharing the cost for infrastructure development for improved service delivery, such as information technology and e-government, makes service improvements possible that would otherwise be too costly for an individual municipality.

- The literature demonstrates that municipalities can overcome hurdles to cooperation on a case-by-case basis.

- Governments must counter public concerns about loss of control, as well as concerns of organized labor, in order to realize the potential savings in consolidating public safety services.

- Local governments want to capitalize more fully on potential cooperation. States have provided incentives to encourage cooperation.

- A more focused effort by elected and appointed officials to develop arrangements for consolidating service delivery will lead to increased cooperation.

- Incentives to organizations that have been effective in creating cooperation would increase the amount of shared arrangements for service delivery.
• Fiscal stress provides an incentive to increase the focus on developing consolidated service delivery mechanisms. Grants to maintain services, which relieve fiscal stress for individual governments, reduce that focus.

Overall, the literature addressed questions in the scope of work for this report:

• The literature holds that consolidation of services leads to efficiencies in service delivery and improved service quality. The extent of those gains is not clear.

• Other arrangements that often have positive results on efficiency include privatization, regional agreements (such as special districts or regional and joint boards), centralized services, and two-tier governments.

• The literature identifies factors that are associated positively with higher levels of consolidated service delivery. They include wealth of the community, poverty of the community, and population size. Fiscal stress also induces cooperation. Suburban communities show a stronger association between increased contracting and lower cost of services. The literature does not discuss the relative benefits of these arrangements or the relationship of the benefits to other municipal factors.

• Two factors are negatively related to the level of consolidated service delivery. Large metropolitan areas and municipalities that receive grants for services are less likely to consolidate service delivery.

• Fear of loss of local control and labor issues are among the most common obstacles to consolidation of service delivery. Appropriate planning and communication about the consolidation effort may bring forth other issues that need resolution to make the consolidation succeed.

However, the literature did not address some questions in the scope of work:

• The literature does not indicate if there is any association between increased consolidation of services and expanse of the municipality, population age, demand for services, education levels, natural topographic features, age of community and infrastructure, the residential versus commercial/industrial land use mix, or factors inhibiting ratable growth.

• It does not identify the optimal arrangements for service delivery or the municipal factors that are associated with the optimal arrangements.
Questions from the Scope of Work on *Costs and Benefits of Service Delivery Consolidation among Municipalities*

**Purpose of the Literature Review**
Are there cost or other efficiencies to be gained from the consolidation of municipal service delivery efforts across local governmental jurisdictions? Are there diseconomies of scale associated with service delivery operations over multiple jurisdictions? The commission is focusing initially on the following services: Police, Fire, Emergency Dispatch, Public Health, Public Works, Courts, Construction Code Enforcement, and Animal Control. Examine this question from the perspective of population served, population density, service area, or other measures of service delivery jurisdiction deemed relevant and appropriate in the New Jersey municipal context.

The literature is clear on the advantages of service delivery consolidations, but it is less clear on the extent of the cost savings or diseconomies that occur when services are delivered over multiple jurisdictions. Information in the academic literature on consolidation for specific services includes public safety functions, animal control, utilities and public works functions such as road maintenance, solid waste, and parks maintenance.

Evaluate and rank the effect of population density (a pattern of sprawl versus compactness).

*The literature did not address the effect of density on the propensity to engage in cooperation.*

Evaluate and rank the effect of physical expanse of the municipality.

*The literature does not explain the effects of physical expanse.*

Evaluate and rank the effect of demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services).

*Wealthier communities are more likely to engage in consolidated service delivery. Communities with high amounts of poverty, also, are more likely to cooperate.*

Evaluate and rank the effect of character of land use (bedroom community versus heavily commercial or industrial tax base).

*Suburban communities, which tend to be bedroom communities, show a stronger positive relationship between lower costs of government per capita and the use of contracting (both private and with other governments).*
Evaluate and rank the effect of natural features (limitations on development owing to aquifers, steep slopes, and other environmental sensitivities).

*The literature does not discuss these factors.*

Evaluate and rank the effect of age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe).

*To the extent that suburbs fit this definition, they show a stronger positive relationship between lower costs of government per capita and the increased use of contracting (both private and with other governments).*

Evaluate and rank the effect of demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub).

*The literature did not address these specific factors, although it addressed related factors. There is less use of cooperation in large metropolitan areas. Suburban communities show a stronger positive relationship between increased use of cooperation and lower government costs per capita.*

Evaluate and rank the effect of stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth).

*The literature does not discuss these factors. The literature did indicate general fiscal stress leads to greater cooperation.*

What are the optimal arrangements for delivering the abovementioned services that maximize cost efficiency or achieves other benefits?

*The literature provided no single formula, but identified shared services as successful. Other successful arrangements in specific situations include two-tiered governments, privatization, special districts (particularly if regionalized), centralized services, and varied forms of joint policy making.*

Identify a range of optimal arrangements depending upon municipal characteristics such as any enumerated above.

*The literature does not discuss which service delivery arrangements are optimal in relation to municipal characteristics, although it does relate some of the factors to the likelihood of adopting consolidated services, as discussed above.*
Identify any challenges encountered in attempting to define optimal service delivery arrangements and an analysis of any difficulties encountered.

Challenges are situation specific, but the most common are fear of loss of control and labor issues. The literature that discusses addressing these issues mentions communication and planning as the best devices to overcome such hurdles.

Other variables which would be helpful for commission members to understand in attempting to identify criteria for recommending merging of services/alternative service delivery arrangements to those which currently exist.

The literature on overall municipal consolidation warned that consolidation is only cost-effective if the merged municipality can reduce resources, that is, if it requires fewer employees or less equipment/facilities to deliver equivalent service. The concept of reduced resources is also appropriate for service consolidations, as are concerns about the resulting service quality. It appears that municipalities must address both of these areas of concern as they evaluate specific arrangements, rather than as a universal mechanism to identify potentials for service consolidation.
PURPOSE OF THE REPORT

To meet its overall goals as expressed in the legislation signed into law on March 15, 2007, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) commissioned a literature review to address the question of whether there are cost or other efficiencies to be gained from the consolidation of municipal service delivery efforts across local government jurisdictions. In the RFP it issued, LUARCC stressed several questions the research should address. The Committee also expressed concern that the review of the literature should take into consideration the population served, population density, expanse of the service area, and other measures of the service delivery jurisdiction relevant and appropriate in the New Jersey municipal context. The Commission asked that the researchers identify optimal arrangements for delivering municipal services that maximize cost efficiency or achieve other benefits. Further, LUARCC requested an analysis of difficulties or challenges encountered in attempts to define optimal service delivery arrangements. The Committee asked to be informed of any additional variables useful in the development of criteria for recommending the merging of services or for recommending alternative service delivery arrangements. LUARCC asked SPAA to seek evidence in the literature of any diseconomies associated with service delivery operations over multiple jurisdictions.

SPAA searched the literature with these guiding questions and directions as a focus. The research team identified the range of optimal service delivery arrangements in light of:

- population density
- physical area
- demographics of the population served
- land use characteristics
- natural features
- age of the community and infrastructure
- unusual demands on municipal services and the infrastructure
- stress on the property tax base.

The annotated bibliography that is included in this report is the result of that research. SPAA has synthesized the information in the articles listed in the bibliography and arrived at the conclusions this report presents.

The consolidation of services with other governments can take several forms, and has at least as many terms to describe the arrangements: inter-local agreements, shared services, service transfers, government partnerships, contracts with government, and many other variants. The most popular term is “shared services,” and that is the term used throughout this report. Typically, one entity delivers the services to another. For example, a small township may contract with a larger neighboring town for police services.
The other detail that needs to be resolved is how this literature review differs from the literature review for *Optimal Service Delivery Arrangements and Efficiency*. We have kept those instances of a transfer or consolidation of service to another existing government entity within this report on shared services. In the report on alternative service delivery, we address those arrangements that involve non-government entities, create a new government entity, or shift the full responsibility to a more central government for all the local governments within that central government (essentially, a mandated transfer of responsibility). There is overlap and considerable reason to review the two reports as a body.
# REVIEW AND SYNTHESIS OF THE LITERATURE

## Government Use of Consolidated Service Options

In 2005, the consulting firm Accenture conducted a survey of 143 senior-level government managers in 13 countries, including the U.S. The research indicated that shared services are a common practice in many states in the U.S., and internationally:

Many governments have started to implement some components of a true shared services operating model, but few have implemented them all; thus, few governments have achieved the full potential of their shared services. While many government organizations have started the journey toward a true shared services model, most still have a ways to go. Beyond lower costs, the focus must be on improved service to customers. (Accenture, 2005)

Another survey conducted closer to home in Broome County, New York, among elected officials, provides more details about the status of utilizing shared services in local governments. The report identifies services and candidates for optimal sharing of services, noting courts, health insurance, parks and recreation, and highways as the best services to target for implementation (Sinclair, 2005). In New Jersey, an edited review of a series of case studies (Holzer et al, 2007) includes some important services the Broome County study ignored, perhaps because the delivery of these services is located at a higher level of government in New York State. Fire, police services, solid waste, public works, parks and recreation, and library services are the focal points for inter-local service agreements in these case studies. The Accenture report adds human resources, property management, legal services, finance, and information technology to the list. A different position is that the most obvious functions for sharing are highly regulated transaction-based processes such as revenue collection and benefit payments (Price Waterhouse Coopers, 2005).

The Broome County report echoes the international survey conducted by Accenture on the extent of service sharing. It finds that while a lot of sharing occurs, particularly in the use of highway equipment, snow removal, parks and recreation, dog control, and fire services, governments produce many services directly. The survey results show that half (21) of the services inquired about were only shared by one or two governments.

The mechanisms by which sharing occurs are mostly informal. The Broome County study surveyed only elected officials, and not staff. One might expect that elected officials would depend on their staff to review and utilize more formal mechanisms. However, based on interviews with municipal staff, the “Division of Local Government Services: Joint Services Assessment Report” (Holzer et al, 2003) came to the same strong conclusion that informal mechanisms lead to cooperation between governments.

Informal networks are particularly effective with capital-intensive services, such as road maintenance, which requires expensive equipment that may be underutilized unless
municipalities share the equipment. Although there are seasonal peaks in road maintenance, it is a scheduled activity, unlike a fire response, so managers of the entities can accomplish the planning between themselves. This happens informally even without agreements on many occasions, because Public Works Directors typically have good relations with their peers. Thurmaier’s work in Kansas on inter-local agreements finds that a majority of cities and counties have at least one such agreement. The research concludes that a “norm of reciprocity” culture exists, creating networks of service sharing (Thurmaier and Wood, 2002).

An additional important fact surfaced in the Broome County study. Broome County’s local government officials expressed interest in exploring additional service sharing. They targeted sixty-six services for further investigation. Officials seem to believe that service sharing is a worthwhile strategy for improving the cost effectiveness of their governments or improving the services that they provide to residents.

Motivations for Consolidating Service Delivery

There is no question as to whether there are good reasons for sharing services. It is a regular topic discussed on state websites, and there are many programs to encourage these forms of inter-governmental collaborating.

Economies of scale are a key reason for service sharing in communities all over the world (Foroutan, 1992). Most African countries have already recognized the benefits of regional integration and participate in at least one regional arrangement. In the United States, regional integration helps by consolidating sub-regional markets in order to benefit from economies of scale. For example:

With shrinking revenues and growing service demands, Michigan communities are joining forces to provide services to their constituents. Joint, or shared, services are agreements between local governments to combine resources to provide a service to their communities. This combination is a cost saving method for municipalities that want to maintain service levels but find that tax laws inhibit their ability to fund them individually. The result is a classic example of economies of scale …. (Davis, 2005)

In the City of Buffalo, a different proposed model of delivering services would reduce the local tax levy by 9 to 13 % (Center for Government Research, 2006). The city would continue to provide core governance, administrative, and other key services, but contract out for services other governments or the private sector could provide.

However, there is consensus in the literature that shared services should go beyond cost savings and focus on improved service to customers. “The primary motivation for the introduction of shared services should not be cost savings but rather improvements in service delivery and quality.” (Spoehr et al, 2007) To extend this further, there are opportunities to not just improve service, but also entirely change the nature of the
service delivered. To develop breakthrough enhancements in service delivery, it is sometimes necessary to justify the cost of acquisition of the tools or infrastructure required for development, such as software or hardware. Shared services, or some other arrangement which spreads the initial costs, can make this investment practical.

The area of Information Technology and E-governance is an example of how shared services could change the nature of the service by centralizing operations. Almost every town in New Jersey has a website. They vary in their quality and effectiveness in serving the public, but they fall far short of the potential suggested by E-governance models. The development of capacities such as E-commerce is expensive and requires technical skills not typically available in small municipalities. The area of records retention, records storage, and disaster recovery is another technologically based service, the development of which is constrained by the limited resources of small municipalities. The necessary communication and network infrastructure, advanced indexing and retrieval software, and storage and back-up facilities require extensive capital investment. A larger entity can make these costly investments in technology because it spreads the costs of the basic tools over a larger population, reducing the initial cost per capita to develop the technology infrastructure for all the municipalities that will benefit from the technology.

To improve business processes in the implementation of shared services, such as with information technology services, the Accenture report recommends outside expertise be used in the planning and implementation of new technologies. This additional cost is practical because the Accenture report focused on larger governments. Smaller local governments could obtain some of the benefits of outside expertise with the support of County Shared Service Offices or government industry associations such as the New Jersey Government Management Information Sciences.

Expertise is important in what might be considered non-technical arenas, such as road maintenance (Deller et al, 1992). “Due to small size and relative isolation, rural governments are inherently limited in developing either effective policy or efficient delivery systems. These structural barriers have prevented many rural public officials from developing the capacity, resources, and expertise needed for managing increasingly complex problems.” The author writes about production consolidation as a viable option where physical consolidation is not. Specifics include cooperative arrangements, state or regional circuit rider programs, jointly hired engineers or cooperative purchasing of equipment.

A study of social care managers showed the managers did not believe the cost savings were the significant benefit (Stephenson, 2008). The study found, “Shared services could help deliver quicker response time and flexibility, standardized services and delivery of new services.” Interestingly, the managers, who did not view the cost savings as substantial, felt that the savings from sharing services would not exceed 11% — still an attractive number to many.

The problems of inefficiency in local governments can have several solutions. The International City/County Management Association (ICMA) routinely studies what
solutions municipalities implement, including restructuring. Inter-municipal cooperation was the most common form of restructuring (55 percent of all reported restructuring cases since 1990). Privatization was next most common at 28 percent, followed by reverse privatization at 7 percent and governmental entrepreneurship at 6 percent. Cessation of service (4 percent) was the least common restructuring alternative (Warner and Hebdon, 2001). Mutual aid agreements represent the simplest and most common form of cooperation. Joint production of a service was the next most common, followed by contracting with another government. Formation of special districts was rare.

As opposed to using private contracting, “contracting governments turn to other governments as vendors for services that risk contract failure.” (Brown, 2008) Monitoring and oversight can also be provided at a lower cost than what is required to monitor an outside (non-governmental) contractor, but the cost saving benefits of contracting still accrue because of economies of scale.

Indianapolis accomplished broad service transfers with the implementation of UniGov (Rosenthal, 2000). UniGov includes a consolidated city-county government, 4 independent cities, and more than 50 other units of local government. This city-county consolidation program concentrated a limited or select group of urban services at the regional (defined as county) level while permitting most other critical urban services to be delivered by administrations and agencies serving different, often much smaller, areas within the county. Structurally, UniGov is a multilayered local government system under which authority for economic development, public works, parks, transportation, and some elements of public safety is transferred to the county (or regional) level—the first layer in a multi-tiered structure. The consolidated government is the final authority for land use and economic development programs for the entire county.

The report “Optimal Service Delivery Arrangements and Efficiency” discusses more fully the choice of optimal arrangements for service delivery. The reader should consult it for more discussion of other alternatives.

Factors Associated with Consolidation of Services

The ICMA also provides insight into what conditions lead to adopting shared services (and private contracting) as a solution to the problems of efficient service delivery (Warner and Hefetz, 2002b):

- Governments using higher levels of cooperation and privatization show lower average per capita expenditures. Moreover, the efficiency effect is greatest for suburbs.
- Both cooperation and privatization are higher among higher-income municipalities. Whereas cooperation is favored by higher-poverty municipalities as well, privatization is not.
- Municipalities with council-manager forms of government were more likely to pursue higher levels of privatization in 1992, but less likely to
pursue privatization in 1997 and more likely to pursue cooperation. Professional management is not significantly related to cooperation.

- Larger metropolitan places are less likely to engage in cooperation. They have the least to gain from economies of scale.

In a report conducted in the previous year, Warner and Hebdon came to a different conclusion: “Population size has a significant impact on local government restructuring including inter-municipal cooperation and privatization -- larger townships and counties were more likely to restructure.” (Warner and Hebdon, 2001) Jeong also used the ICMA data and concluded that population size does not explain the choice of joint production (although the focus was on contracting out). Joint production was also encouraged by a reformed county political structure (specifically elected county executives, who may not be termed “reform” in all local governments) and robust financial resources (Jeong, 2006).

Cooperation in road improvements and construction is more likely when there are high per capita property taxes, or when there is a greater reliance on inter-governmental revenues. However, cooperation in lower cost activities like traffic signs, signals, and street light maintenance was not related to per capita property taxes. The wealthiest communities cooperate more, except on roads. Populous and high growth governments cooperate more on roads. Cooperation is more likely in a service area to which a large portion of the budget is devoted. (Leroux and Carr, 2007)

In two situations, the development of a regional asset by an outside organization led to sharing. The Nature Conservancy developed the Greater Hanover Recreation Park, but three boroughs own and maintain it (Luzerne County, 2005). In addition, two cities in Massachusetts benefited from a fire station built by a developer as part of an agreement between the parties (Conti, 2008). In a similar vein, the Mayor of Pittsburgh made an unusual offer to provide services such as trash-hauling, animal control, building inspection, computer, ambulance, firefighting, personnel, police and public works, and bulk purchasing to the suburbs (Allen, 2008).

The Somerset County Business Partnership made recommendations to the state (Somerset County Municipal Managers Association, 2006) that represent their proposed solutions to the barriers they perceive. Many of these are requests for state incentives, such as:

- for municipalities to continue existing programs, for implementation as well as, or in place of, feasibility studies that may waste money
- for host municipalities to create new shared services
- for seeking out privatization (which can be the ultimate result of a shared venture), and
- for organized groups with a proven track record of facilitating shared services

The Partnership mentioned two other hurdles to sharing: health care costs and a lack of support for employees displaced by the sharing arrangement.
The concern of trade unions in Scotland turned the displaced worker issue into a green argument. They see increased centralization of jobs draining them from more remote communities, which runs counter to the idea of being more environmentally-conscious by maintaining shorter commutes. (MacMahon, 2008)

In Massachusetts, barriers in the state law prevent municipalities from pursuing regional agreements conveniently — a problem that has hampered some communities’ efforts to regionalize services. A proposed legislative package would allow communities to enter partnerships without having to engage in renegotiations with union groups, thus removing a significant barrier (Gunderson, 2008). This author also mentions that local barriers to the plans to create a regional public-safety dispatch system for Maynard and Stow (Massachusetts) failed in the early 1990’s. Towns could not agree on the specifics of a shared dispatch center, such as where the center would be located and how much actual savings would be realized. There was also a fear of losing personalized services, a common barrier to implementation of shared services.

The Pioneer Institute for Public Policy Research noted that a 1993 attempt to combine fire and police dispatch services in 13 western suburbs failed, because “town and public safety officials didn't feel right handing over control of a system that is at the heart of local government. They also got flak from police and fire unions.” (Bolton, 2008) The study noted that dispatch duty was a safety net for older or injured police officers and firefighters. The consultant estimated the collaboration would have saved each community millions over ten years.

Morton, et al (2008) raised the same argument of loss of local control in Iowa. “Citizens seem to prefer their local government directly providing police services rather than entering into inter-local agreements.” The authors cast this as not meeting public infrastructure expectations and state further: “We find that civic structure—citizen engagement in solving public problems—is positively and strongly associated with perceived quality of small town public services.”

The Australian Institute for Social Research notes barriers in addition to those associated with unions and employees (Spoehr et al, 2007). The complexity of a shared service agreement can create high costs for the research and development of a business case supporting it. The authors couple this with a fear that a hasty implementation of an inappropriate model might dissipate the accumulation of the human capital assets of corporate knowledge and skills.

Planning and preparing for the implementation of shared services can help overcome or mitigate the hurdles. A case study from the United Kingdom recommends a thorough examination of the business case and a comprehensive communication program from the earliest stages of implementation (Claps, 2008a). This may be appropriate for a very complex agreement or in order to re-engineer a process perceived to be inadequate to deliver services efficiently. It also shows that the costs of feasibility studies can be high, as Spoehr suggested above.
States have been creating programs to encourage shared services. New Jersey has programs to support shared services, including grants and a website full of information to help municipalities who want to enter into shared service agreements. New York State municipalities anticipate $245 million in savings over five years from an investment of not quite $30 million in local government efficiency (Cortes-Vazquez, 2008). The investment was in the form of grants to municipalities beginning in 2005. The New York State Department of State has increased its technical assistance and outreach capacity, has formed a partnership with the Albany Law School to augment its efficiency assistance and research capacity, and has formed a new Office of Coastal, Local Government, and Community Sustainability to deliver services to modernize local governments.

The Southeast Michigan Council of Governments (SEMCOG) is a strong supporter of joint services (Davis, 2005). They have a detailed database with examples of success stories from the region. They recognize that there are concerns when entering such agreements, and have published pamphlets to aid local officials in the transition. In addition, they have recognized joint service programs and administrators with awards since 1998. They have also created a series of reports in conjunction with the Metropolitan Affairs Council (MAC) to assist communities with the creation of intergovernmental services.

In a chapter of the 2007 edition of *The Book of the States*, the editors “…recommend that in an effort to effectively encourage the development and implementation of shared services, states should: (1) provide financial support or incentives; (2) collect and disseminate concrete information regarding the benefits of shared service initiatives; (3) establish shared service performance measures; (4) develop a central point of information to field questions from communities who are in the process of developing, implementing, or sustaining shared services; and (5) work to ensure that the long-term interests of the taxpayers are paramount.” (Holzer et al, 2007)

### Stated Benefits of Service Consolidation

The literature is full of examples of estimates of projected savings prior to implementation of a shared service, as well as savings the authors state resulted from the implementation of the service arrangement. However, studies such as a report commissioned by the Division of Local Government Services several years ago found that: “Concrete information about the benefit realized was seldom produced. The most common perception was that some savings has occurred, but that the larger benefit was in service to the community.” (Holzer et al, 2003) A report commissioned by the Public Service Association of South Australia to identify some of the key lessons from shared service arrangements in Britain and Australia (Spoehr et al, 2007) cast doubt on the credibility of the numbers that are produced:

- While cost savings can be achieved, projected savings targets are rarely met.
- The benefits of shared services are often overestimated.
• The costs of shared services are often underestimated because implicit costs and externalities are often not measured.

The benefits of service consolidation suggested in the literature are substantial:

• A study showed savings of over $64,000 a year would be realized for each community in an inter-municipal group in Niagara County (New York) and an additional $90,000 to $162,000 for the group if cost reduction strategies were followed in 12 areas of expense (Center for Government Research, 2006).

• The Shared Services Savings Report documented $13,695,962 in savings to Somerset County (New Jersey) taxpayers because of local shared services initiatives by the municipalities, the schools and the county (Somerset County Municipal Managers Association, 2006).

• Merging the Village of Angola and Town of Evans police departments in New York State could achieve annual savings of $140,000 (Center for Government Research, 2006).

• The elimination of the court and police department in Audubon Park (New Jersey) will save $500,000 in the next five years, with Audubon providing the services for an additional $300,000 in revenue, net the costs of providing the service (Colimore, 2005).

• In North Redington Beach (Florida) the cost of law enforcement, now provided by the Pinellas County Sheriff's Office, is nearly $100,000 less than what was paid previously for the town's police department (Estrada, 1999a).

• When the county assumes the policing responsibilities, Bellair Beach (Florida) will save about $250,000 annually (Estrada, 2007).

• The annual savings in the first fiscal year for the City of Inverness (Florida) to hire the County Sheriff’s Office to provide police services would be $108,206, but the start up costs would be $6,523 more than keeping its police department (Gonzales, 2004).

• Kenneth City (Florida) would save a half a million dollars a year if the county sheriff took over policing duties (Lindberg, 1999).

• The town of Evans (New York) agreed to create a dedicated policing zone with the Village of Angola, eliminating $350,000 from the Village’s annual budget (Cortes-Vazquez, 2008).

• Creating the West Side Police Department (Pennsylvania) will save about $73,000 in each of three communities every year and allows them to strengthen police presence during busy times (Luzerne County, 2005).

• Combining three part-time police departments in Massachusetts will not lead to cost reductions in the first few years, but might do so over a longer period, and it would provide better police service (Appleton, 2008).
• Police departments in Wrentham, Norfolk, Plainville, Franklin, and North Attleborough (Massachusetts) have been working the kinks out of a wireless data-sharing network. The effort is an attempt to improve police services in the communities. By linking databases, the communities hope to retain a law-enforcement edge (Bolton, 2008).

• Fire service from the Indian Rocks Fire District (Florida) will cost the town nearly $90,000 less than in previous years. Combined with the savings for eliminating the Police Department, there will be a 25% reduction in taxes (Estrada, 1999b).

• Closing Fire Station 28 (Florida) could save taxpayers $1.2 million without affecting the quality of service (Lindberg, 2008).

• A consultant reported that consolidating the county and city fire departments in Pinellas County (Florida) would save an estimated $10 - $15 million a year (El-Khoury, 2005).

• Officials expect to save $5 million in operating and equipment costs annually, since five towns joined in the North Hudson Regional Fire and Rescue Department (New Jersey). The number of firefighters will decrease from 332 to 307 through attrition (Smothers, 1999).

• Although there was debate about the cost savings and quality of service, the consolidation of the Spring Hill (Florida) and county fire rescue districts could improve service. Two of the fire stations that sit next to the border of the Spring Hill Fire District could provide services in addition to those for life threatening situations, which are the only situations currently covered by mutual aid (King, 2004).

• Combining the volunteer fire companies in Butler Township and Conyngham Borough (Pennsylvania) into the Valley Regional Volunteer Fire Company allowed them to pursue purchasing a new ladder truck, which was impossible before the merger (Luzerne County, 2005).

• The City of Brooksville (Florida) will save $195,564 per year by having the sheriff take over the dispatching of 911 emergency calls (Neill, 2007).

• Burlington County (New Jersey) projected $100,000 savings per year as the result of cooperative purchasing of electricity, if the 40 towns and other governments in the county participated in the bulk purchase program (Bewley, 2003).

• When unsafe and inadequate water supplies necessitated creating a new water district, the Town of Cape Vincent (New York) formed a partnership with the Village, avoiding the $1 million cost for constructing a second water tank, and reduced the annual cost per household by $200 (Cortes-Vazquez, 2008).

The reader should note that most of these savings claims are not audited and many are projected. The academic literature bemoans the lack of concrete data. Unfortunately,
unaudited claims of savings are the best information available. They are consistent with the belief that cooperation promotes savings, but the amount of the savings cannot be confirmed or relied upon.
COMMENTS ON THE LITERATURE

The academic literature has some empirical basis for evaluating shared service studies. There is little debate about whether sharing services promotes efficiency in local government; the consensus is that it does. The literature certainly far more consistently supports service consolidation than it does formal consolidation. Despite many cost estimates and statements as to cost reductions and quality improvements achieved, the quality of this data is mixed. There is a great amount of variance in the savings estimates, far more than would be accounted for by a proportional relationship to population size or budget size. The literature on measuring efficiency provides possible reasons for apparent inconsistencies – varied accounting practices and the inclusion of different budget lines from one government to another. However, gathering more accurate or precise data will not change the overall conclusions of practitioners, consultants, or academics -- who uniformly perceive shared services as effective in promoting efficiency.

Because of the informal nature of many cooperative agreements, and the informality of how they are developed, both the academic literature and government information sources probably underestimate the amount of cooperation. These sources may not count long-standing relationships as inter-governmental agreements and may not consider certain forms of sharing as shared service agreements (for example, in New Jersey, mutual aid is not generally included as a shared service).
CONCLUSIONS

The literature supports the assumption that inter-governmental cooperation can provide cost and quality efficiencies. In addition to discussing the benefits of shared services and other forms of cooperation, the literature provides insights into how to increase the amount of service delivery consolidation:

- **Quality Improvements**

  Most shared services success stories assess cost savings, but some of these cases state that improvements in service delivery and quality should be the primary motivator in forming shared services. Sharing seldom reduces quality of the service, and often sharing improves quality. Quality issues are the sole motivation for some arrangements.

- **Providing High Cost Service Improvements**

  There are functional service areas, such as information technology, in which local government has made only limited investments. Traditionally, this is because the government perceives the costs to be unpalatable to the citizenry. Service sharing offers the potential for quality improvement in areas such as this, without incurring the skepticism of the public about expensive investments.

- **Case-by-Case Resolution of Obstacles**

  Although there are hurdles to implementation of shared services, they are situation-specific, and should be assessed and resolved in forming an agreement. There are a great many successful shared service arrangements. Even the concern with loss of local control or local delivery of the service is an infrequently mentioned obstacle in the literature.

- **Public Safety Services**

  Reports from around the country indicate a reduction in public safety costs is possible. The transfer of police, fire, and dispatch services to other units of government are common potential efficiencies cited in the literature. Police and fire are difficult services to consolidate, because of the public’s concerns with safety (in terms of response times) and organized labor’s concerns with employment security.

- **State Encouragement**

  Evidence shows that governments want to do more service sharing than they actually accomplish. States are trying to encourage collaboration through grant and education programs. Some have tried to launch more of an outreach
program, and others have tried to create databases of needs to meet through sharing.

- **Need for Focus**

  Successful shared services require planning. Probably the greatest obstacle to doing what everybody seems to want — shared services that result in economies — is not spending the time and detailed effort to focus on it. The fact that most sharing arrangements come from informal networks and contacts is testimony to the fact governments do not spend enough time thinking about how to be efficient. They need to be encouraged to invest time and resources to do so.

- **Incentives to Productive Organizations**

  Grants, such as New Jersey made available to develop county offices dedicated to promoting shared services, create incentives and the focus to evaluate more cost-effective strategies. These state grants to counties are a good step in the direction suggested by the Somerset County Business Partnership’s proposal to fund effective sharing organizations in order to continue their successful work.

- **Positive Effects of Fiscal Stress**

  Fiscal and budgetary pressures also encourage cooperation between units of government. Conversely, aid or grants, which maintain a service, are disincentives to finding alternative service delivery arrangements.

Finding the right level of government to deliver a service is an important concern of LUARCC. In addition to the consolidation of services discussed in this report, the report *Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Efficiency* discusses some other mechanisms to move service delivery to the appropriate government, including centralized government, special districts, and regional delivery structures.
APPENDIX A -- ANNOTATED BIBLIOGRAPHY

Literature Review and Analysis Related to Costs and Benefits of Service Delivery Consolidation among Municipalities

This report was prepared by Accenture and describes key findings when a study was commissioned to see how well shared services had worked. With the new study, Accenture sought to identify the drivers, challenges, benefits and critical success factors for shared services initiatives in government. This study, managed by Accenture’s in-house research arm, Accenture Research, surveyed 143 senior executives at all levels of government in a selection of agencies across 13 countries.

Pittsburgh Mayor offered the city’s services at bargain rates to its neighbors in the suburbs. While some municipalities place an absolute priority on autonomy and have no desire to deal with Pittsburgh, others are eager to negotiate shared services with the city in any cost-effective agreement. Services offered included trash-hauling, animal control, building inspection, computer, ambulance, firefighting, personnel, police and public works. Bulk purchasing on goods and supplies and even electricity, and the sale of city water were offered.

This dissertation examines the dynamic of metropolitan governance in terms of inter-local contractual arrangements that govern the delivery of collective goods by local government. The author classified them into two general forms: restrictive and adaptive contractual arrangements. The empirical results show that vertical intergovernmental relations involving municipal and county governments generally employed a restrictive rather than adaptive form of interlocal contracting. Functional service area and the number of collaborators involved also play an important role in explaining a local government’s decisions to enter into particular forms of interlocal contractual arrangements. The study then focused on the adaptive and restrictive forms of contractual arrangements as distinctive action arenas in the provision of public safety.

A newspaper article discusses the effort of three small towns around Brimfield, Massachusetts to provide police services in a shared arrangement. The elected officials, after a preliminary meeting with the three chiefs requested a detailed analysis of the feasibility of replacing the current part-time service augmented by the state police. One chief felt there might be long-term savings, but an immediate improvement in service quality was possible.

Avril, T. (2000). Towns Find They Can Get as Good as They Give by Sharing Services and thereby Saving Money. 130 communities are being rewarded by the state. The real payoff is to taxpayers. *The Philadelphia Inquirer*: B01 - B02.

This article covers service sharing in Mantua, New Jersey, which garnered property tax credits from the State of New Jersey Department of Community Affairs program to promote shared services. This particular sharing was between school systems for transportation services. The article states the savings from the tax credit alone will amount to about $104 per average household.


This newspaper article from Burlington County, New Jersey discusses the rationale behind the county’s attempts to bulk purchase electricity for its constituent municipalities. It reports on the progress of this effort and the estimate of savings if the energy is purchased under a county bid.


Cooperation of neighboring local authorities in the provision of regional public goods can be efficiency enhancing due to economies of scale, a better realization of fiscal equivalence or dynamic efficiency gains. While the need for such cooperation between local authorities is undisputed, there are different positions concerning the form the cooperation should take. Some argue that local authority mergers are the most efficient and democratic strategy. Others argue that functional cooperation is more appropriate and that mergers reduce the welfare enhancing effects of competition between local authorities.


This news article discusses shared services in Boston, especially police services. This article uses a report that had been released recently on regionalization as a backdrop for the discussion of a new data-sharing
system among five towns. The report investigated past failed attempts at regionalization and a successful consolidated 9-1-1 county dispatch system.

Considering the high tax burden in Westchester County, New York, this article reports on the insights of various town managers and county and state officials about cutting costs. They cited better technology used throughout the county and shared services as ways of reducing costs. Dissolving governments, even in New York State that has so many governments, was not seen as politically feasible. The article discusses the evaluation of shared police services between the Town of Greenburgh and the Village of Dobbs Ferry. A similar attempt had failed between Dobbs Ferry and the Village of Irvington because Irvington feared losing community police coverage and felt the benefits would not outweigh the effort.

This paper explores the dynamics of government-to-government contracting at the local level in order to examine how governments' shared organizational characteristics, notably a governance structure based on political accountability, potentially make them more attractive vendors for services that risk contract failure. Relying on panel data from the 1992 and 1997 International City/County Management Association’s (ICMA) Alternative Service Delivery surveys along with data from the U.S. Census and other sources, this paper identifies service areas in which governments most frequently turn to government vendors. In particular, a comparison of public works and transportation services - service areas with low risks of opportunism leading to contract failure - and health and human services - a service area with high risks of opportunism leading to contract failure - shows that contracting governments are more likely to utilize governments over private firms and non-profits for high-risk services. This is not the case for low-risk services, suggesting that governments view other governments as trusted contract vendors.

The report outlines shared services initiatives by state and local governments, noting NJ's reforms, including SHARE, COUNT and the creation of a permanent commission on Shared Services. The authors also conducted a worldwide survey on governmental shared services and report on 18 findings.
This is a report of the Camden County Improvement Authority on the results of a survey identifying the services that each municipality performs, does not perform or contracts to another municipality or consultant. The survey focused on the municipalities in the Black Horse Pike Strategic Plan area.

This government consulting firm reviews some of their experience with municipalities in New York State regarding shared services in various counties. The review includes developing a two-tiered government approach involving private contracting, consolidation of fire and police services, and other agreements brokered between counties and cities. The article discusses various service types in different size entities.

This chapter of the community plan is devoted to the various shared services utilized by the city of Anoka in Minnesota. This chapter details well over 100 different services that are done cooperatively with other organizations, including the county, other municipalities, the schools, and non-profit organizations. The services shared include the full range of city services including administration, public safety, community development, parks and recreation, and utilities.

This article is a case study set in U.K. regarding shared services and partnerships when three local U.K. councils came together to reduce cost and share services. Taxes and revenue sharing are discussed as well as the intricacies of U.K. partnerships. Different stages of the partnering are discussed as well as the success factors and lessons learned.

This newspaper article reviews several efforts in Camden County, New Jersey to save money through shared services. The article projects savings for some of these efforts and discusses other plans for sharing services. It describes the statements of the Department of Community Affairs about the SHARE grant program.
This article speaks about the work a law firm has conducted on social services in England. The authors interviewed managers in England regarding social services shared among municipalities and counties. Managers did not feel that overall social services saved them that much money, but they were pleased with the quality of service that resulted.

This newspaper article reviews the controversy surrounding a fire station built by a developer to provide service to its new large housing development. In particular, several groups have raised issues of how response will be affected. The Towns of Revere and Malden will share the station.

This NY Department of State press release speaks about a shared services report that was compiled very recently. New York created a shared services grant in 2005 for municipalities to partner with each other to share costs through difficult economic times. The highlight of the report claims that $245 million in projected savings could be realized through local government partnership and cooperation. Progress in each of the shared service areas has been analyzed and examined.

This 1970 report was referenced in the LUARCC project reports to provide evidence of the on-going nature of the interest in shared services and the efficiency of local government.

With shrinking revenues and growing service demands, Michigan communities are joining forces to provide services to their constituents. Joint, or shared, services are agreements between local governments to combine resources to provide a service to their communities. This combination is a cost saving method for municipalities that want to maintain service levels but find that tax laws inhibit their ability to fund them individually. The result is a classic example of economies of scale, providing a community with increased general fund flexibility and
improvements to quality of life that contributes to the supply side of economic development. Stable general funds will allow communities to finance capital improvement projects and offer incentives to potential firms, while offering services that will attract residents that build the tax base and provide employees to those potential firms.


The research reported here examines the ability of a sample of Midwest township officials to produce low-volume rural road services in an economically efficient manner. Farrell-type measures of input use and scale efficiency are reported. Results suggest that over 50% of costs may be unnecessarily incurred because of input use inefficiency. Correlation between output measures and the efficiency measures suggests that larger jurisdictions are more efficient than smaller jurisdictions. In addition, 84.5% of the townships exhibit technology characterized by increasing returns to scale. These results suggest that jurisdictional consolidation of production-related responsibilities may yield substantial cost savings.


Structural limitation and narrow managerial capacity have consistently hampered both an effective and efficient decision-making process in small rural governments. Due to small size and relative isolation, rural governments are inherently limited in developing either effective policy or efficient delivery systems. These structural barriers have prevented many rural public officials from developing the capacity, resources, and expertise needed for managing increasingly complex problems. This article provides a brief review of the performance measurement literature and suggests an alternative approach to assessing the efficiency of producing local public services. The proposed method seeks to incorporate microeconomic theory into the measurement process. The case of producing low-volume rural road services in the Midwest is examined to illustrate the method. The data used to study managerial efficiency in the production of rural road services were gathered from a mail survey of Illinois, Minnesota and Wisconsin township road officials and the 1982 Census of government. The sample contains 435 independent observations of Midwestern townships.


Broad consensus exists in Australian policy circles on the need to enhance the efficiency of local government. However, the question of the
most appropriate model for local governance remains controversial. Quite apart from larger amalgamated municipalities, a range of promising alternative options can be identified that may be able to effectively combine more efficient service delivery with vibrant local democracy.


This article presents the results of a detailed study of potential cost savings from consolidation of New York school districts. It extends past research on consolidation by developing a theoretical framework which distinguishes several dimensions of economies of scale and defines an empirical cost function for schooling. While findings apply directly to New York, the method developed here has general relevance to state education policy by helping to target candidate school districts for consolidation, and, where consolidation is not feasible, adjusting state aid formulae to reflect more accurately the cost impacts of scale.


This newspaper article presents some cost savings estimates from a study by MGT of America evaluating the consolidation of county and city fire departments in Pinellas County, Florida. This report was presented to the County's Charter Review Commission. MGT recommended that the county form a single fire district.

Estrada, S. M. (1999a). Audit Finds Finances in Good Shape. *St. Petersburg Times*

This newspaper article reports on the presentation of the annual audit in North Redington Beach, Florida. The audit showed $100,000 in savings for eliminating the police department, but it appeared eliminating the fire department did not represent a cost savings, since the cost of using the Indian Rocks Fire District is about the same. In the next year, this cost will be removed from the town budget and will be billed directly to the resident through the county tax bill.


This article discusses how the Mayor and Commission in North Redington Beach, Florida determined to set the tax rate in light of cost savings that would be realized from sharing fire services with the Indian Rocks Fire District and eliminating the police department because the Sheriff's Office is providing police services. The Mayor and Commissioners argued over whether the savings should be used to offset taxes or offset increased expenses for other purposes.
Estrada, S. M. (2007). City close to a deal with the sheriff. St. Petersburg Times This newspaper article discusses the deliberations on police services that will occur at the upcoming Belleair Beach, Florida city council meeting. The city has received proposals to provide policing from the County Sheriff's Office and from Belleair, but the Sheriff's arrangements were described as more attractive. The Sheriff has offered to waive start-up costs in exchange for some of the existing equipment owned by Belleair Beach and has agreed to hire any officer now serving and in good standing at Belleair Beach.

Finney, M. (1997). "Scale Economies and Police Department Consolidation: Los Angeles Evidence." Contemporary Economic Policy 15(1): 121-127. This paper tests for scale economies for police departments operating in Los Angeles County. Inter-governmental sharing in providing police services prevails within the county, suggesting that scale economies exist in producing this public good. Empirical analysis here rejects the hypothesis that police output is produced under increasing returns, which would be an efficiency explanation for the large degree of consolidation found within the county.


Friedman, A. (2008). Roselle Looks to Linden for Firefighting. The Star-Ledger. Newark, NJ: 1. This newspaper article explains the controversy over a proposed shared service agreement in which Linden would provide fire services for Roselle in New Jersey. The controversy arose because the Mayor of Roselle had not discussed his proposal with any of the council prior to their public council meeting. The Mayor had discussed applying for a New Jersey State Department of Community Affairs SHARE grant with the Mayor of Linden to study the shared agreement.
Gonzales, S. (2004). Inverness Begins Dismantling Police. *St. Petersburg Times*. The news article reports the results of a city council vote in Inverness, Florida to dissolve the police department. The vote was not unanimous with some council members contending it was too emotional an issue to act on at this time. Concerns were addressed about response times, since the Inverness response had traditionally been quicker than the Sheriff's Office, which will now assume responsibility. Inverness would now enjoy the higher standards and additional capacity and expertise in the Sheriff's Office. The Sheriff's Office considered the following factors in developing the plan accepted by the Council: loss of local control and police identity, the future of Police Department employees, level of service and cost.

Greenblatt, A. (2006). Little Mergers on the Prairie. *Governing Magazine*. This article examines how Iowa has addressed the concern that it has more government than it now needs. Iowa has 3,000 cities and towns, 99 counties as well as special districts. The Governor proposed to replace all local governments with 15 regional governments. With a stagnant tax base, Iowa has few options. The Governor's proposal was met with resistance, but, on a positive note, Iowa municipalities are working more together. "For local officials, saving a lot of money right away isn't as great a concern as doing things more efficiently when they can, whether that means streamlining internally or reaching out to new partners."


The news article reports on a conference in Worcester, Massachusetts on regionalizing government. The conference, sponsored by the Massachusetts Municipal Association and Northeastern University, had 200 attendees. The article presents the differing perspectives of some of the local government officials in attendance. The President of the association remarks on some legislative impediments to regionalization and cooperation.


This report was commissioned by the Division of Local Government Services to conduct a study of shared service programs among New Jersey's 566 municipalities. The purpose was to find best practice models and relate experiences through the documentation of case studies. A telephone survey was conducted for 27 case studies of shared services in municipalities throughout the state of New Jersey. The survey of managers in each of the municipalities attempted to assess cost savings or other benefits that occurred because of the cooperative agreement.
Holzer, M., Leila Sadeghi, and Richard W. Schwester (2007). Exploring State Shared Services and Regional Consolidation Efforts Prepared for publication in *The Book of the States, 2007*. State governments are examining the prospect of inter-local shared service initiatives as a means of reducing service delivery costs and providing tax relief, as well as streamlining local services, eliminating duplicative services, and enhancing governmental responsiveness and transparency. This article provides an introduction to the possible array of shared services; highlights best practices; discusses state funding mechanisms designed to encourage shared service agreements; and provides recommendations to state and local government leaders seeking to develop, implement, or improve existing shared service programs.

Jeong, M.-G. (2006). Public and Private Joint Production: Institutional Theory of Local Governance and Government Capacity. *Annual Meeting of the Midwestern Political Science Association*. Palmer House Hilton, Chicago, Illinois: 1-27. The question of who should provide public services has continued to gain attention among scholars and practitioners. By focusing on the ‘make’ or ‘buy’ decision, most studies are conspicuous in their lack of addressing joint production, especially at the county level. This paper fills the research lacuna by incorporating institutional theory of local governance and government capacity. Using the 2002 ICMA Survey on Local Governments’ Alternative Service Delivery, this paper examines what factors determine the adoption of joint production of public services at the county level. Probit analysis is employed to estimate county choice of joint production in 2002. Overall, the preliminary analysis suggests that the reformed counties increase the likelihood of joint production adoptions. The findings also suggest that government capacity has a modest influence on joint production.

Judson, T., and B. Carpenter (2003, July). "Cooperate, Collaborate, Consolidate: Options for Local Government in Monroe County." Local governments in Monroe County are caught in the convergence of several trends that are producing current and projected multi-million dollar budget deficits in the two largest governments - the city and the county - and have strained town, village and school district budgets as well. These trends are (1) the rising cost of government at all levels; (2) a stagnating local economy; and (3) high local taxes. The primary objective of this report was “To inform and update the public about opportunities to make government more effective and efficient through cooperation, collaboration, and/or consolidation."

King, R. (2004). Costs, quality core issues of fire debate. *St. Petersburg Times* This news article discusses the debate in Spring Hill, Florida over the consolidation of the fire and rescue service into the operation of Hernando County. The costs will go up for those with less valuable properties, but
down for those who own more valuable properties, because the county rate is a flat fee, not a rate based on the property valuation. The debate also centers around the differences in the operations of the the county and the Spring Hill services.

In recent years, analysts have begun to study cooperation on public services among local governments. These studies often have concluded that services with scale economies are likely candidates for shared service delivery. This article contributes to the emerging literature on this topic by examining inter-local service arrangements for 10 public works services in Michigan. The authors use data on the service delivery arrangements from 468 general-purpose local governments in Michigan to examine the role played by the factors in explaining inter-local cooperation on public works.

This news article reports that the Kenneth City council will discuss disbanding its police department at the council meeting. The city would contract with the Pinellas County Sheriff's Office for policing services. The start-up costs would be offset to some degree by equipment that would be turned over to the county and all qualified Kenneth City officers would be hired by the county. The decision not to renew the contract of the Kenneth City police chief started the discussions of other options.

This news article reviews the deliberations of the Pinellas County Commission in Florida to close a fire station as a cost saving measure. There has been a concern for some time about the duplication caused by two similar stations that serve adjacent areas and have a low volume of calls. The boundaries of fire districts would be re-aligned. The writer interviewed fire officials from the effected fire stations, officials from neighboring districts and county officials to present different perspectives in the controversy.

This newsletter speaks about the various shared services initiatives throughout Luzerne County in Pennsylvania and speaks specifically about the police departments initiatives. Shared services success stories such as the police department and recreation parks are also explored and expanded upon. The newsletter describes the fire department’s initiatives with shared services.

This news article reports that trade unions have publicly warned the Scottish government that shared services may not deliver the cost savings that are expected. The unions also expressed concerns about the centralization of jobs, draining them from remote communities, and the use of larger suppliers for goods, reducing the need for local businesses by the Scottish government.


Onondaga County in New York State investigated: 1) the experiences of municipalities around the country in their successful attempts at inter-governmental consolidation and cooperation, 2) data on expenditure and dedicated personnel by municipality in Onondaga County, 3) assessment of applicability of efforts in other parts of the country to Onondaga County, and 4) functional areas in the 36 municipal governments in the county that may lend themselves to cooperation and/or consolidation. This article summarizes what has been happening in Onondaga County, New York with regards to many types of municipal reform efforts including shared services and consolidation.


This news article reviews the presentation of a voluntary audit of Washington Township, New Jersey conducted by the New Jersey Department of Treasury. The audit identified some savings that would be possible by consolidating services at the county level. It also recommends contracting buildings and grounds maintenance services.


Local governments are responsible for financing and providing an array of public services ranging from police, fire, and emergency medical services to streets, parks, and water. Two mechanisms, namely civic structure and interlocal collaboration, have the potential to solve the problem of providing high quality public services in the face of declining resources and increasing needs. The authors find that civic structure - citizen engagement in solving public problems - is positively and strongly associated with perceived quality of small town public services. Although many rural towns show significant positive association with citizen ratings of overall service quality, citizens seem to prefer their local government directly providing police services rather than entering into interlocal
agreements. This suggests that many services are better provided directly.

Mower, J. (2003). City-County Consolidation and Other Regional Approaches to Reorganizing Local Government: Lessons Learned from Examples and Experts. This memo, an informal but comprehensive document prepared for the City of Syracuse, includes a selection of lists, charts, and excerpts from research conducted related to municipal mergers in varying metropolitan statistical areas (MSAs). The author summarizes the latest city-county merger of Louisville, Kentucky and summarizes case studies from several other MSAs. Substantive lists of the “easiest” and “hardest” methods of providing shared services are included, and reasons for failure or success of municipal mergers are noted.

Neill, L. (2007). Sheriff's Office Taking over Dispatching Duties. St. Petersburg Times. This article reports on the Hernando County, Florida, Sheriff Office taking over the 9-1-1 dispatching for Brookville. Brooksville City Council instructed the City Manager to work out the details of the contract with the Sheriff's Office, but it is estimated to save over $195,000 annually. The Council favored keeping the savings in the City's reserve account rather than reducing taxes because of financial uncertainty.

New York Department of State (2007). Shared Municipal Services Grants Awarded. US Fed News. This New York State 2008 Shared Services Annual Report, summarizing the implementation of the first three years (2005 - 2007) of the Shared Services program at the Department of State. This program consists of both technical and financial assistance to New York’s municipalities. One component of this program has been the Shared Municipal Services Incentive (SMSI) grant program. SMSI provides incentive grants in five funding areas: shared municipal services, shared highway service, county-side shared service, local health insurance, and local consolidation. Of the $25 million for the year’s program, $10 million is dedicated to 25% increases in aid for municipalities that consolidate.

Price Waterhouse Coopers (2005). Shared Services for Even Greater Efficiency in Local Government. The paper provides an overview of the challenges that have prevented local authorities from delivering on the shared services agenda in the past; details the benefits the shared services model is able to deliver; and provides a guide to overcoming the barriers preventing this model from being more widely adopted in local government. At present authorities are tinkering at the edges. The authors believe a bolder approach is required to tackle the real barriers preventing authorities from succeeding.

This article describes the successful UniGov program, uniting the city of Indianapolis and Marion County in central Indiana and outlines "lessons learned" for other communities considering such a consolidation effort. Through this consolidation, the city of Indianapolis was transformed from what was described by its chamber of commerce in the 1970s as "a cemetery with lights," into a destination for those seeking a vibrant downtown area and a major sports center, as well as the nation's 12th largest city by the 1990s. Indianapolis was one of the three major consolidation or merger experiences in the 1960s and 1970s. Indianapolis's specific contribution to the experiment in governance models was a city-county consolidation program that concentrated a limited or select group of urban services at the regional (defined as county) level while permitting most other critical urban services to be delivered by administrations and agencies serving different, often much smaller, areas within the county.


This report discusses the shared services implemented in Broome County, New York. This report utilized a survey conducted among elected officials as well as analysis of the cost savings mentioned. The report identifies the services most likely to be successfully shared, and specifically identifies courts, health insurance, parks and recreation, and highways as the best candidates. The report also speaks about the ideal methods of implementing and creating shared services agreements.


This newspaper article reviews the beginning of operations of a regional fire department organized by five towns in New Jersey. The article reviews some of the obstacles in achieving the regionalization, mechanisms used to overcome or reduce the obstacles, and the expected cost savings.


In Somerset County, the Somerset County Municipal Managers Association (SCMMA), a professional association of municipal administrators working with the Somerset County Business Partnership (SCBP), is focusing on identifying the "roadblocks" that are inhibiting municipalities from furthering shared services with other towns, the school districts and the county. Somerset County's towns have created a model shared services network that has experienced outstanding and
unparalleled success. However, it is the belief of the SCMMA and the SCBP that the more reachable areas to facilitate sharing have been accomplished and, at this point, “all the low fruit has been picked.” The obstacles that stand before municipalities are the significant legislative barriers that inhibit bringing shared services to the next level. This white paper makes an attempt to identify the “roadblocks” and to actively push for meaningful legislation that will streamline and facilitate the expansion of shared services.


This report was commissioned by the Public Service Association of South Australia to identify some of the key lessons from shared service arrangements in Britain and Australia. The report provides an overview of the Australian experience, while an accompanying report details lessons from the British experience. Both reports are presented in the context of the South Australian Government’s deliberations regarding the introduction of a shared service model for the provision of business services to the South Australian public sector.


The delivery of shared services is seen as a significant benefit by social care managers, but is unlikely to save much money, a new survey has found. The survey of 178 public sector managers, by law firm Browne Jacobson, found those working in adult social care and children’s services were most positive about the benefits of sharing services.


Public policies addressing complex issues require trans-jurisdictional solutions, challenging hierarchical modes of public service delivery. Interlocal agreements (ILA’s) are long-established service delivery instruments for local governments, and research suggests they are plentiful, with a majority of cities and counties involved in at least one ILA. Although ILA’s are an established feature of local government operations, previous research is atheoretical, largely descriptive, and unsystematic. This article explores ILA’s as social network phenomena, identifying the rationales and underlying values for various ILA’s, central and peripheral actors, and brokering roles. In particular, the authors explore the utility of incorporating network exchange theory into public management network models to identify the relative power of actors in network exchange relationships. They find that a "norm of reciprocity" culture predominates an economizing value as the rationale for an abundance of service

Inter-local agreements have long been a useful tool for municipal and county governments to increase the effectiveness and efficiency of local government services. Yet while they have a long history in practice, there is little empirical study of the nature and characteristics of ILA’s, especially on a statewide basis. This paper presents results from a statewide survey of inter-local agreements in Iowa created in the period, 1993-2003. Results suggest that governments believe that their ILA’s increase the effectiveness and efficiency of local services.


Local government restructuring should no longer be viewed as a simple dichotomy between private and public provision. A 1997 survey of chief elected township and county officials in New York shows that local governments use both private and public sector mechanisms to structure the market, create competition, and attain economies of scale. In addition to privatization and inter-municipal cooperation, two alternative forms of service delivery not previously researched - reverse privatization and governmental entrepreneurship - are analyzed here.


Political fragmentation in metropolitan regions makes equitable and efficient delivery of public services difficult. Regionalism, although promoted as more equitable and rational, has found limited political support. Public choice theory argues, against regionalism, that political fragmentation can promote competition and efficiency by creating markets for public services. The authors assess the efficacy of market solutions for metropolitan public service provision by comparing privatization with inter-municipal cooperation and evaluating each on efficiency, equity, and democracy grounds. Using probit regression analysis of a national survey of local government service delivery from 1992 and 1997, the authors find that both alternatives promote efficiency, but equity and voice are more associated with inter-municipal cooperation than privatization.


Using data from the ICMA surveys of alternative service delivery
arrangements of local governments from 1992 and 1997 and data on poverty and income from the U. S. Census of Population 1990, the authors explore whether local governmental use of market forms of service delivery differs by metropolitan status. The surveys measured the form of service delivery for 64 different public services in seven broad areas: public works and transportation, public utilities, public safety, health and human services, parks and recreation, culture and art, and support functions. This article assesses the distribution of privatization and inter-municipal cooperation across localities in the metropolitan region and finds them most common among suburbs.


This report focuses on shared services in the context of rural health networks. It discusses the types of shared ventures that networks typically engage in, the role network leaders can play to coordinate and broker shared services, and the issues that leaders should consider when deciding to share services.


There are a large number of multi-village water supply schemes (including regional schemes) in India. The prime motivation for setting up multi-village schemes is based on the desire to provide full water supply coverage to rural areas despite local water scarcity and increasing contamination of sources. In such circumstances, it becomes necessary to make use of distant water sources. However, treating and piping water from remote sources is often complex and expensive, and it is felt that the cost of supply can be reduced and options broadened through shared service provision.
APPENDIX B
METHODOLOGY

SPPA employed a methodology for the literature reviews that consisted of thorough searches in all of the major databases representing social and policy journals. In consultations with SPAA faculty, the research associates used the knowledge from the early stages of the research to refine and expand the search, as was appropriate. SPAA created or used the following tools to assure we accomplished the aims of the Commission:

- LUARCC questions from the RFP
- Bibliographic databases
- Search terms specific to each report
- Reference database
- Annotated bibliographies
- Articles/web resources

In the first phase of the basic strategy, SPAA devised appropriate search terms and used them to search all the relevant bibliographic databases. Promising articles were recorded as citations in the reference database (EndNote®) and the full-text article content was saved to the article file (as a PDF).

In the second phase of the search, research associates assigned to the project thoroughly examined the articles for findings that addressed LUARCC’s questions. The research associates recorded each finding in the reference database, attaching it to the question it addressed and evaluating the degree to which the article or information resource substantiated the finding. The research associates completed this substantiation, weeding out articles based solely on ideology and rating the remaining articles according to the amount of evidence or the concreteness of the argument presented. During this process, team members reported any new search terms or resources they encountered to the project librarian and project director. Subsequent searches utilized this additional information.

The supervising faculty member assigned to this project and the project director reviewed the results of the first phase of the search, which found the potential articles. When necessary, they redirected the search to clarify information or find new sources. In addition, the faculty members and project director reviewed each finding for relevance to the LUARCC questions.

SPAA sought LUARCC’s input through the review of an outline of the proposed methodology to ensure that the literature search was comprehensive and focused on the questions LUARCC raised. Because of the iterative process used in the information review, the early results of our search enhanced the project tools further.
LUARCC Questions

SPAA extracted the questions from the LUARCC RFP into a spreadsheet and distributed it to all team members assigned to the project. The research team coded each of these questions with a Question ID, using the listing in the spreadsheet. This allowed the research associate to link a finding from an article to the question it addressed using the abbreviated Question ID. The questions and Question ID are in the appendix.

Bibliographic Databases

The Bibliographic Database appendix lists all the literature and news databases and other information resources, such as websites and books that SPAA used to find relevant information for LUARCC. The researchers and the project librarian knew certain resources were more comprehensive and relevant for this project. SPAA focused on Lexis/Nexis Academic as a resource for periodicals, including newspaper articles, journal articles, and legal documents; Academic Search Premier as the best resource for academic journals; Business Source Premier as a similar resource; and Public Affairs Information Service for government reports, monographs, and articles.

Search Terms

The search within the bibliographic databases and in other resources used the following terms:

- City-county agreement or service
- Shared service
- Inter-local
- Mutual aid
- Cooperative agreement
- Outsourcing network
- Service outsourcing
- Merged departments
- Joint service
- Cooperative purchasing
- Inter-governmental agreement
- Reciprocal agreement
- Service coordinating
- Co-production
- Multi-government projects
- Joint production
- Intergovernmental coordination
- Intergovernmental partnership
- Intergovernmental association
- Intergovernmental collaboration
- Information/equipment/facilities sharing
• Purchasing/insurance pools
• Regional planning
• Joint meeting

The searches always used the following additional governmental terms as limiters:

• Municipality
• Local government
• Borough
• Village
• Town
• Township
• City
• County
• State

Since the search engines differ in their filter capabilities (and the Boolean logic which drives some of them), the research associates used their familiarity with literature searches to make efficient search decisions. They focused on North American articles, cross-cultural studies that included the United States, or other articles, despite their geographic origins, if they were applicable to the subjects the Commission wanted to investigate in a New Jersey context.

Winnowing the search results while casting a broad enough net is not always easy, and never automatic, as our preliminary analysis showed. The research associates, with faculty guidance, used their expertise in the content area they investigated and their experience with literature reviews as doctoral students to make the searches practical and the results comprehensive and responsive.

**Reference Database – EndNote®**

SPAA summarized the important information from the articles and reports found in the literature searches in EndNote®, a high-quality bibliographic software program by Thompson Reuters. As part of its work products, SPAA will provide a copy of EndNote® to LUARCC with the on-line annotated bibliography for all five projects it completed. A printed copy of the annotated bibliography for this project is Appendix A to this report.

The findings are the core of the reference database and of this project. The findings contain a brief extract from the article or a summary of a key point that links the article to LUARCC’s questions. The following information is contained with the findings to provide a quick review:
• **Question ID** – this will contain a project designation and identify the specific question addressed
• **Finding** – a brief description of the finding, conclusion or discussion
• **Cases** – if it is based on an empirical study, the number of cases that support the finding
• **Basis** – reviewer’s evaluation of the substantiation of the finding in the source on a 0 to 4 scale. If there is no basis, it is rated a 0; poor evidence, a 1; some evidence, 2; well substantiated, 3; considered a fact, 4
• **Unit** – the government unit or region cited in the finding

It is not necessary to use EndNote® to make the most of the project completed by SPAA. Rather, the working details contained in EndNote® are there to support this report.

**Library of Documents**

Each article, or an appropriate extract from the article, report, book excerpt or other research document, has been stored and will be accessible in a separate file as a Word Document or PDF. LUARCC will be able to link to it from the EndNote® reference database that SPAA will provide as a final work product. It will contain the full text of appropriate parts of the information sources found. Hence, it will allow LUARCC or its staff to review the original information that SPAA has summarized, allowing the Commissioners to be confident about their decisions as LUARCC goes forward.

**Preparing the Final Report**

SPAA used the findings in the EndNote® annotated bibliography to organize the report for each project around the questions initially specified by LUARCC in the original RFP. In preparing the report, the faculty and project director reviewed the findings, interacted with the research associates who had found and read the articles, and, when warranted to resolve any ambiguity, read the original texts. This final review generated SPAA’s conclusions in this report. In addition to this report, SPAA will provide an overall summary report for all five projects it completed.
# APPENDIX C

## RFP QUESTIONS

<table>
<thead>
<tr>
<th>RFP Question</th>
<th>Question ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there cost or other efficiencies to be gained from the consolidation of municipal service delivery efforts across local governmental jurisdictions? Are there diseconomies of scale associated with service delivery operations over multiple jurisdictions? The commission is focusing initially on the following services: Police, Fire, Emergency Dispatch, Public Health, Public Works, Courts, Construction Code Enforcement, and Animal Control. Examine this question from the perspective of population served, population density, service area, or other measures of service delivery jurisdiction deemed relevant and appropriate in the New Jersey municipal context.</td>
<td>SS</td>
</tr>
<tr>
<td>Evaluate and rank the effect of population density (a pattern of sprawl versus compactness)</td>
<td>SS1</td>
</tr>
<tr>
<td>Evaluate and rank the effect of physical expanse of the municipality</td>
<td>SS2</td>
</tr>
<tr>
<td>Evaluate and rank the effect of demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services)</td>
<td>SS3</td>
</tr>
<tr>
<td>Evaluate and rank the effect of character of land use (bedroom community versus heavily commercial or industrial tax base)</td>
<td>SS4</td>
</tr>
<tr>
<td>Evaluate and rank the effect of natural features (limitations on development owing to aquifers, steep slopes, other environmental sensitivities)</td>
<td>SS5</td>
</tr>
<tr>
<td>Evaluate and rank the effect of age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe)</td>
<td>SS6</td>
</tr>
<tr>
<td>Evaluate and rank the effect of demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub)</td>
<td>SS7</td>
</tr>
<tr>
<td>Evaluate and rank the effect of stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth)</td>
<td>SS8</td>
</tr>
<tr>
<td>What are the optimal arrangements for delivering the abovementioned services that maximize cost efficiency or achieves other benefits?</td>
<td>SS9</td>
</tr>
<tr>
<td>Identify a range of optimal arrangements depending upon municipal characteristics such as any enumerated above</td>
<td>SS10</td>
</tr>
<tr>
<td>Identify any challenges encountered in attempting to define optimal service delivery arrangements and an analysis of any difficulties encountered</td>
<td>SS11</td>
</tr>
<tr>
<td>Other variables which would be helpful for commission members to understand in attempting to identify criteria for recommending merging of services/alternative service delivery arrangements to those which currently exist</td>
<td>SS12</td>
</tr>
</tbody>
</table>
APPENDIX D
BIBLIOGRAPHIC DATABASES

Academic Search Premier
Books in Print with Reviews
Business Source Premier
Catalog of U.S. Government Publications
Conference Board Research Collection
CQ Researcher
Eagleton Poll Archive
Factiva
Gartner Research
GPO Access
Historical Statistics of the United States: Millennial Edition
Human Population & Natural Resource Management
Index to Legal Periodicals Full Text
Investext Plus
Lexis/Nexis Academic
Lexis/Nexis Statistical
National Technical Information Service
New York Times
Public Affairs Information Service - International and Archive
SA ePublications Social Science & Humanities Collection
Social Sciences Full Text
Statistics Canada's E-STAT
TV-NewsSearch: The Database of the Vanderbilt Television News Archive
Value Line Research Center
Wilson OmniFile Full Text, Mega Edition
Worldwide Political Science Abstracts

Other Information Sources

Research and Information Resources for Public Administration
Using the Political Science and Government Literature
Public Performance and Measurement Review
http://spaa.newark.rutgers.edu/sharedservice.html
SPAA's Public Performance and Reporting Network (www.ppmrn.net)
Local Unit Alignment, Reorganization, and Consolidation Commission

Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Local Government Efficiency

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May 6, 2009
TABLE OF CONTENTS

Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Local Government Efficiency

EXECUTIVE SUMMARY 1
PURPOSE OF THE REPORT 6
REVIEW AND SYNTHESIS OF THE LITERATURE 8
COMMENTS ON THE LITERATURE 23
CONCLUSIONS 24

APPENDIX A – ANNOTATED BIBLIOGRAPHY 26
APPENDIX B – METHODOLOGY 53
APPENDIX C – RFP QUESTIONS 57
APPENDIX D – BIBLIOGRAPHIC DATABASES 58
Executive Summary

The Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus in October of 2008 to conduct a review of the literature on optimal service delivery arrangements and local government efficiency. Most municipal services are delivered directly by the local government in the United States. The next most common form of delivering services is by contracting: with another government, with a non-profit organization, or with a for-profit private organization.

This report reviews five broad categories of alternatives to direct delivery of services:

- Contractual agreements
- Centralized services
- Special districts
- Joint boards
- Regional policy groups

There is promise in many of the models, but more work must be done to assess both the best way to configure them (or combine them) and estimate the cost savings or other benefits that will accrue. This report elaborates on what is known about such models, even though some of them do not have a significant number of implementations in the United States.

The conclusions of the report discuss the features of each of the service delivery arrangements. Based on what the literature indicated:

- Shared services are a contract with another government to deliver a service and are generally agreed to improve efficiency.
- Services contracted to a private firm (or non-profit organization) can also be efficient, but typically require greater capacity on the part of government to monitor the contract.
- Special districts that operate within the boundaries of the municipality provide singular expertise in a service, but often duplicate administrative functions, create a new government unit, and may reduce accountability.
- Regionalized special districts can provide economies of scale for targeted delivery systems, such as infrastructure-based services, in which a larger entity may be more efficient.
- Centralized services (county or regional) typically provide scale economies, but reduce local control of service delivery and may constrain constituent representation in service delivery policy making.
• Joint boards fit well to a specific function that requires coordination over a broader geographical area, and can provide local representation for policy decisions about the function or service.

• Constituent members form regional policy groups to provide local involvement in regional services and encourage collaboration. Most often, they control multiple services provided regionally through a separate regional or county organization.

• Governments form hybrid arrangements to obtain the benefits of particular service delivery arrangements, offsetting potential disadvantages by combining one delivery arrangement with the features of a different service delivery arrangement. For example, the constituent municipalities may form a regional policy group in combination with a county provided service to provide local representation in service delivery decisions. Without this representation at the regional level, there may not be any local input in decisions about a county delivered service.

The literature describes these different service delivery arrangements and highlights their strengths and weaknesses. It does not compare their relative efficiencies or give comprehensive direction about how to choose an optimal service delivery arrangement to use in specific situations.

**Questions from the Scope of Work (RFP) on Optimal Service Delivery Arrangements and Local Government Efficiency**

Purpose of the Literature Review:
Are there optimal arrangements for delivering various public services from the standpoint of efficiency and to minimize duplication of efforts? Are there diseconomies of scale associated with larger service delivery operations? The commission is focusing initially on the following services: Police, Fire, Emergency Dispatch, Public Health, Public Works, Courts, Construction Code Enforcement, and Animal Control

*The literature considers all of the mechanisms covered in the report as efficient in specific situations, but it does not provide comprehensive recommendations, nor does it provide a comparison of the relative efficiency of the different arrangements. Labor-intensive services (police is often mentioned) demonstrate a diseconomy of scale in that smaller municipalities (as low as 5,000 population is mentioned) often deliver these services more efficiently. The literature seldom addresses specific service types in examining service delivery arrangements.*
Is optimal service delivery affected by population density (a pattern of sprawl versus compactness)?

The literature on service delivery arrangements does not address population density.

Is optimal service delivery affected by physical expanse of the municipality?

The literature on service delivery arrangements does not address expanse of the municipality.

Is optimal service delivery affected by demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services)?

Wealthier communities are more likely to engage in consolidated service delivery. Communities with high amounts of poverty also are more likely to cooperate.

Is optimal service delivery affected by character of land use (bedroom community versus heavily commercial or industrial tax base)?

Suburban communities show a stronger positive relationship between lower costs of government per capita and the use of contracting (both private and with other governments).

Is optimal service delivery affected by natural features (limitations on development owing to aquifers, steep slopes, other environmental sensitivities)?

The literature on service delivery arrangements does not address limitations based on natural features.

Is optimal service delivery affected by age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe)?

To the extent that suburbs fit this definition, they show a stronger positive relationship between lower costs of government per capita and the increased use of contracting (both private and with other governments). The literature on consolidation indicates that the political desire to use a suburban tax base to finance the maintenance and restoration of deteriorating infrastructure is a factor in consolidations. This could also affect any regionalized or centralized arrangements, including joint boards, regional policy groups, and special districts, if they are regional.
Is optimal service delivery affected by demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub)?

The literature does not address these specific factors, although it addressed related factors. There is less use of cooperation in large metropolitan areas. Suburban communities show a stronger positive relationship between increased use of cooperation and lower government costs per capita.

Is optimal service delivery affected by stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth)?

The literature on service delivery arrangements does not address stress on the property tax base in the manner described, but the consolidation literature did note that the desire for equity in service delivery has an impact on the desire to consolidate (depending on the policy goals) and the success of the consolidated government. Equity concerns are most noticeable when the parts of the area being consolidated have vastly different valuations. This can affect any form of service delivery arrangement that is supported by a tax base from the entire service delivery area, including parts of the area with disparate valuations. It can affect any regionalized or centralized arrangements, including joint boards, regional policy groups, and special districts, if they are regional.

What are the optimal arrangements for delivering the abovementioned services that maximize cost efficiency or achieves other benefits?

For services that show economies of scale, such as infrastructure based services (water utilities, for example) or specialized services (crime labs, for example), contracting with a regional provider (including shared services), regionalized special districts, centralized services, joint boards, or regional policy groups may all be more efficient and effective than directly delivered services. If regional coordination is beneficial to the delivery of the service, such as land use planning, regional efforts are more appropriate than local efforts. This could take the form of regional policy groups, joint boards, regionalized special districts, or county or other centralized services.

Identify a range of optimal arrangements depending upon municipal characteristics such as any enumerated above.

The literature does not relate optimal service arrangements to municipal characteristics, except for the policy considerations that involve the use of disparate tax bases for funding services in parts of the service area.
Any challenges encountered in attempting to define optimal service delivery arrangements and an analysis of any difficulties encountered?

Regional policy groups and joint boards primarily serve the function of representing the interests of all the constituent municipalities. Municipalities form these groups because they fear the loss of control when they transfer service delivery to a regionalized or centralized entity. They function both to make policy decisions about service delivery that are best for the entire area represented and to provide a monitoring function to assure that the services are delivered effectively and efficiently. Successful regional policy groups, joint boards, and two-tier governments most often seem to be formed by consensus and created voluntarily.

Any other variables which would be helpful for commission members to understand in attempting to identify criteria for recommending merging of services/alternative service delivery arrangements to those which currently exist

It is difficult to defend the logic of the benefits of non-regionalized special districts. The literature has identified these structures as being under attack in a number of states and countries. They are a source of fragmentation and duplicate the administrative services of the municipality. In essence, special districts represent multiple governments serving the same geographic area. Only the service delivered is different.
PURPOSE OF THE REPORT

To meet its overall goals as expressed in the legislation signed into law on March 15, 2007, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) commissioned a literature review to address the question of whether there are optimal arrangements for delivering various public services from the standpoint of efficiency and to minimize duplication of efforts. This follows the enabling legislation for the establishment of LUARCC, which states:

Consolidating local units, structurally and administratively streamlining county and municipal government, and transferring services to the most appropriate level of government for delivery would help to alleviate the property tax crisis by reducing the administrative costs of local government and making the delivery of local services more efficient due to economies of scale.

In the RFP it issued, LUARCC stressed several questions the research should address and expressed concern that the review of the literature should take into consideration the population served, population density, expanse of the service area, and other measures of the service delivery jurisdiction relevant and appropriate in the New Jersey municipal context. The Commission asked that the researchers identify the optimal arrangements for delivering municipal services that maximize cost efficiency or achieve other benefits. Further, LUARCC requested an analysis of difficulties or challenges encountered in attempts to define optimal service delivery arrangements and asked to be informed of any additional variables useful in the development of criteria for recommending the merging of services or alternative delivery arrangements to existing service delivery mechanisms. LUARCC asked SPAA to seek evidence in the literature of any diseconomies associated with service delivery operations in larger governments.

SPAA searched the literature with these guiding questions and directions as a focus to identify the range of optimal service delivery arrangements in light of population density, physical area, demographics of the population served, land use characteristics, natural features, age of the community and infrastructure, unusual demands on municipal services and the infrastructure, and stress on the property tax base. The annotated bibliography that is included in this report is the result of that research. SPAA has synthesized the information in the articles listed in the bibliography and arrived at the conclusions this report presents.

This report does not address intra-government improvements in the efficiency of service delivery. That enterprise has merit but is not part of the mission of LUARCC. This report focuses on service alternatives that are not directly provided by the responsible local government but utilize another organization in some way to attempt to improve the quality and/or reduce the cost of the delivery of the service.
The literature has shown that alternative arrangements for service delivery are often investigated when an evaluation of consolidation has led to the conclusion that complete merger is not the best solution. Dollery and Byrnes (2005) state in “Alternative to Amalgamation in Australian Local Government: The Case of Walkerville” that even though it embraced consolidation in decades past, Australia is one source of the growing skepticism about the results of consolidation. “Enhancing Efficiency in Australian Local Government: An Evaluation of Alternative Models of Municipal Governance” states that although this literature is still new, it does offer an introduction to a range of alternate delivery options (Dollery and Johnson, 2005). This article lists the following arrangements as worthy of consideration: “… existing small councils, ad hoc resource sharing models, Regional Organizations of Councils (ROCs), area integration and joint board models, virtual local government, and agency models.”

This work based on Australian local government provides a jumping off point because the authors propose a range of alternatives, such as ad hoc resource sharing models, regional councils, and joint board models, but it is apparent that potentials exist to define other structures that emphasize the benefits of different types and levels of government. The review that follows discusses these arrangements, an expanded list based on the authors’ suggestions, but also in terms more familiar in the United States:

- Regional Policy Groups
- Joint Boards
- Special Districts
- Centralized Services
- Contractual Agreements

The examples below detail this categorization, but the lines are not rigid and governments may mix the modes of delivery, sometimes with remarkable advantages. The real potential for increased efficiency in the delivery of local government services may lie in matching specific services to the best mode of delivery for that service, given the characteristics of the municipality.

Different goods and services are more effectively and efficiently provided by different modes of service arrangement. The question is not whether one sector is more widely used than another, but whether governments effectively have matched their service responsibilities with the appropriate method of service arrangement. (Stein, 1993)

Although Stein was referring to a narrow range of options available only through contracting, the concept is appropriate to a broader range of alternatives. There are exciting examples of matching modes of delivery to the service need, even in the United States, but it is still a relatively new and evolving perspective.
REGIONAL POLICY GROUPS

Regional Policy Groups are uncommon in the United States, but a couple of examples show great promise and some positive results. The concept is based on the Australian Regional Operating Councils (Dolley and Johnson, 2005), which constitute a formal regional group without any taxing authority. The ROC is governed by a board with two members from each constituent municipality, often the Mayor and a manager or another elected official. Specialist committees or an administrative structure support the board, so the staff can research issues and accomplish work to help the board develop policy recommendations. ROCs provide a formal mechanism for the free exchange of common concerns and potential solutions, engendering a sense of common purpose and destiny. They develop common policy positions based on the combined expertise of their members and facilitate the coordination and rationalization of their member governments. They have been successful in implementing cost saving programs of resource sharing, joint purchasing, and other mutually beneficial schemes that may create economies of scale, economies of scope, and enhanced capacities. They also represent a regional lobbying group for interacting with more centralized governments, enhancing the political power of the individual governments.

Forty years ago, British Columbia established a network of regional districts throughout the province that remains in place today (Sancton, 2005). The regional districts are part of two-tiered governments that successfully provide consensual metropolitan leadership and a framework for voluntary municipal cooperation. Recently, the province of Quebec formed metropolitan communities to perform the same functions as British Columbia’s regional districts. It is too early to assess the impact in Quebec.

Constituent governments have formed similar regional policy groups with local representation in the United States. Based on a report issued over thirty years ago (Masse and DiPasquale, 1975), a centralized agency was formed as a catalyst for change in Monroe County, New York. In 2000, the Monroe County created the Council of Governments (COG) to continue the cooperative efforts of local government and address the convergence of three trends that may strike familiar chords (Judson and Carpenter, 2003):

1. the rising cost of government at all levels
2. a stagnating local economy
3. high local taxes

After evaluating a complete merger of governments, the 2003 report recommended focusing on functional changes that could result in cost savings in the foreseeable future, which is a result often seen in the literature when consolidations have been investigated:

One topic that the Group discussed in detail was the question of the benefits of pursuing a complete merger of the city and county
governments. Because together they represent over 80% of local government expenditures, it seems reasonable to speculate that substantial savings might be achieved by merging the two entities. Without more detailed study, it is not clear what level of savings might be achieved from such a merger in Monroe County. In any event, the substantial legal and political challenges to carry out a structural change of the size and scope required to merge the City of Rochester and Monroe County caused the Rump/COG Group to assume that the time horizon for such an event to occur would be much longer than the time horizon for more achievable changes. Therefore, the Group believes that the community would be better served by focusing on the functional cost savings proposed in this report at this time.

COG has already created substantial savings for its citizens. It meets on a continuing basis to look at common problems of its constituent governments and identifies solutions that fit the needs of the service to be delivered. “Cooperation and collaboration opportunities have been, and will continue to be, accomplished among groups of two or more governments, working together, to pool resources and achieve economies of scale, without requiring a change in any structure of government” (Judson and Carpenter, 2003). However, COG, and the central agency that was its predecessor, has made incremental changes on an evolutionary basis, which was only possible because it is a central agency given the authority to act as a catalyst for change. Some of the specific mechanisms the central body has implemented or is investigating include the following:

- Consolidating various functions into the Monroe County Water Authority, the Monroe County Pure Waters Agency, the 911/Office of Emergency Communications, and the Public Safety Training Academy.
- Developing a vehicle fueling facility used by six entities, a county highway materials bid to utilize volume pricing, and a proposed cooperative purchase of insurance.
- Recommending the development of a community-wide strategic plan to be implemented over a number of years for the provision of more efficient fire services.
- Recommending the development of a consolidated economic agency to reduce costs, but more importantly to determine a unified approach to marketing and economic development activities.

The Monroe County Water Authority and Office of Emergency Communications were new agencies created because home rule legislation, the desire to retain local autonomy and control, and the precedents created by laws and past practices restrict the ability to consolidate operations in New York.

The alternative service delivery options below describe many of these cost saving mechanisms. The importance of the Monroe County COG is that it seeks and achieves continual improvement by having a joint policy making body focused on continual improvements in service delivery. A total budget (not including education) of close to $2
billion annually for local government in Monroe County underscores the importance of COG. Most practical studies of cost savings due to increased efficiency estimate only a 2% annual return for their recommendations. In Monroe County that would be over $34 million annually.

The Louisville-Jefferson County Compact required action of the state legislature as well as the participation of the city and county (Savitch and Vogel, 2000). Its resulting 23 member metropolitan council is comprised of city, county and small city representatives. A portion of an occupational tax funds this council and its small staff.

The Compact reviewed the management of a number of other joint city-county agencies that had evolved over the years. Although they retained four joint agencies, the city and the county divided responsibility for another eight. Either the city or the county assumed full operational and financial control, but they maintained countywide services in either case.

This regional group achieved greater efficiency and effectiveness in service provision through cooperative relations by eliminating duplication of services, realizing economies of scale and providing one voice to provide services coherently. Initially set up for 12 years in 1986, the members renewed it with minimal changes for another ten years. The Compact is justly proud of the fact that the tax-sharing formulas were kept intact and the moratoriums were continued on annexations and incorporations.

**Joint Boards**

The joint board model of local governance represents an attempt to capitalize on the advantages of small and large governments, while mitigating the disadvantages associated with each. The work of Dollery and Johnson (2005) describes this mechanism as Australia implemented it. Australia is concerned with effective representation, which is assumed more available in small governments, but the countervailing assumption is that larger governments are capable of using resources more effectively. The literature refers to the joint board model as a cooperative agreement, inter-local cooperation, or network model. These cooperative agreements (ILC’s) differ from inter-local agreements (ILA’s) in the United States, in that ILA’s are essentially contracts assigning the service responsibility to only one of the entities.

A joint board includes representatives from the constituent local districts so that the constituent governments closely monitor the board’s actions. They are usually organized around a single function or related functions. They are a hybrid of a regional policy board and a special district. They are not involved with service transactions, but are management and planning organizations.

Regional planning boards and economic development organizations that reach across local boundaries are good examples of joint boards. They remove harmful competition between smaller units, which, left to their own vested interests, might hurt the region in
an attempt to maximize their individual economy or revenue streams. Often, these organizations do not provide an operational service as does a water commission.

Joint boards are often a centralized component of a two-tiered governance model. The Greater Louisville Economic Development Partnership resulted from an agreement to share revenue collections from the occupational tax to ensure that the city will benefit from suburban growth, eliminating a source of unhealthy competition (Savitch and Vogel, 2000). The Louisville-Jefferson County Compact formed this public-private partnership for economic development, which includes the chamber of commerce, dissolving the former joint city-county office of economic development. They set up a new city-county office of business services to carry out functions that they did not transfer to the partnership.

UniGov in Indianapolis is a good example of an effective joint board that was also part of a two-tiered government structure. “Structurally, UniGov is a multilayered local government system under which authority for economic development, public works, parks, transportation, and some elements of public safety is transferred to the county (or regional) level—the first layer in a multi-tiered structure” (Rosentraub, 2000).

Consolidating Indianapolis with its surrounding suburban areas inside Marion County offered the potential for financing the public costs of the redevelopment plan across a diverse and affluent tax base. Although UniGov provided for tax integration, it actually maintained some separation between important components of its property tax base. Failure to integrate property taxes into the consolidated government’s fiscal structure could have produced a set of regressive and unfair or unbalanced outcomes with regard to the burden of financing the redevelopment program.

A consolidated governance structure can be an asset in terms of preparing, executing, and managing a downtown revitalization plan endorsed by an appropriate constituency. Although other downtown areas have seen a renaissance without a countywide consolidation program, in the context of Indianapolis’s politics and culture, UniGov established a framework to accomplish something that had not taken place before.

The Sunday Telegraph refers to strategic alliances, which are a part of a centralized government plan in Australia, that could save millions of dollars for municipalities (Markson, 2005). Although there was no detail on how the alliances would operate, the article was noteworthy because of the proposal by the Local Government Minister that examples such as an alliance of two to eight councils to create centralized records storage could save $500,000. These alliances would also create contracts for joint purchasing and garbage collection and road maintenance services.

**Special Districts**

Special districts are organizations created with specialized expertise in a particular service area. They may provide services only within the boundaries of a single municipality or serve several municipalities. These organizations have independent
budgets and governing bodies. In some cases, they also have taxing (or rate-setting) authority. They are operational in nature. Examples are regional water commissions (authorities) or fire districts. Some states refer to them as special districts or service districts. Their advantage, no matter how they are configured, is the expertise in the specific service area and the focus of the organization on this single service, which provides scale efficiencies in the purchase of capital equipment and utilization of resources, in general. This report will refer to these organizations as special districts¹.

In some states, special districts have recently come under investigation, because poor management has allowed inefficiencies and abuses to increase. There is a lesson to be learned -- a promising mode of delivery, which affords a specific focus and heightened expertise in a specific service area, can cease to provide the efficiencies that are possible. When a local government has transferred the delivery of the service, they retain the responsibility to ensure there is a good mechanism in place for monitoring the entity that provides the service directly.

While there are examples of new districts being created, many are being dissolved, or evaluated with the intention of bringing the service under a more direct local government. In his 1996 article, which reviewed some of the changes in Great Britain, Sancton suggested special districts got deserved attention: “Other reasons for restructuring were to ensure cost-effective delivery of local services and to counter the diminished accountability that resulted from the emergence of new inter-municipal special-purpose bodies.”

The concern is that these districts, often buffered from the direct view of the public, are inefficient fiefdoms that may provide inappropriate perquisites for their boards and members. The Louisville-Jefferson County Compact decided to disband two-thirds of the previously independent city-county agencies because they had become poorly managed and inefficient. The final report of a New York State commission indicated concern with a profusion of "special districts" created to provide water, library and other services to the state's sprawling suburbs. Those entities are studded with appointive jobs and many can levy taxes, helping give New York "arguably the most complex property tax system in the nation," according to the commission's final report (Confessore, 2008).

New York State’s concern about Commissioner-run special districts is coming from many sides. Nassau County taxpayers would save about $17 million if towns took over the garbage collection operations from sanitation districts (Cassese, 2008). The Town of Hempstead, which controls its own collections, cost $229 less per household than surrounding commissioner-run districts. If they consolidated these districts under the Town, the report projects the savings at over $13 million. Governor David A. Paterson has called for abolishing salaries and perks for special district commissioners and having towns take over independent sanitation districts.

¹ In New Jersey this term applies primarily to fire districts and authorities, since its general meaning is a government entity formed around the delivery of a single, that is, special, service.
Nassau County homeowners who live outside of villages and cities receive water from private water companies, authorities and special districts (Weitzman, 2007). When analyzed by form of governance, it is apparent that town-run water districts are less expensive than commissioner-run districts. It is likely that private companies are not as reliable stewards of water resources as governments can be.

There are no town-run fire districts in Nassau County, so there is no opportunity to compare costs between districts headed by commissioners and districts headed by a town board. However, Weitzman did find that fire protection districts, where towns negotiate the fire contract, were generally more cost effective for residents than commissioner led fire districts.

Despite concerns with special districts in some areas of the country, other areas are still creating new special districts. They are generally deemed cost effective. For example, a regional subsidiary established for the collection and disposal of domestic waste (garbage collection) was touted as saving over $50,000 per year (Dollery and Johnson, 2005). An explanation for this apparent inconsistency with the findings in New York State and the Louisville-Jefferson County Compact is management issues, which are more likely to go unnoticed in a special district, if its governing body is more distant from public oversight than the governing body of a municipality.

There is nothing to prevent a special district from being well run and cost effective. The specific focus on the single service area offers economies through specific expertise in the service area, if the district is well managed and there is proper oversight to assure good management. However, some efficiency may be lost in overall administration, which is not specific to the service focus. For example, the purchasing and finance functions in a utility authority are redundant with those functions in the municipality that formed the authority.

Centralized Services

Centralized service provision occurs when an existing government assumes the provision of a service for all the smaller governments within its boundaries. County-provided services are typical of these. This mode of service provision should be distinguished from an inter-local agreement between one or more municipalities and its county government. In centralized service provision, usually the larger government has determined that they will provide and deliver the service centrally. In an inter-local agreement, all parties to the agreement or contract can decide to terminate the relationship and return to direct service delivery or some other arrangement.

The main reason for centralizing services is to provide economies of scale or better resources to improve service quality or reduce the costs of delivery. The discussion below examines contracting with a larger government, through a mutual agreement. In this section, we review consolidations to a central government authority made available or mandated for all the local governments within the jurisdiction of the central government. This is not an easy form of alternate service delivery to investigate, because
what would be an alternate model in one state may have been occurring for a century in another (for example, county provision of services in Maryland and Virginia), and, therefore, has not been studied in recent times.

A comparison between Long Island and Northern Virginia provides a good example of this (Long Island Index, 2007). As a starting point, despite the fact that the population of Long Island is only slightly over twice that of the Virginia counties, the number of government entities in the Northern Virginia area totals 17, while Long Island has 239. Including special districts in this total, Virginia’s total does not budge, but Long Island’s jumps by an additional 200 governments to 439.

The report states it is more difficult to introduce efficiencies in Long Island because of the large number of governments:

Northern Virginia makes budgeting and expense decisions on a county-wide basis. Certainly the complex form of governance that has evolved on Long Island as well as other older regions makes it difficult to achieve economies of scale or other efficiencies. With so many governmental units responsible for budgeting decisions of the same services, discussions of efficiencies or change are, at best, made more complicated and at worse, stymied.

The New York State Comptroller’s report (2006) states that New York devised its forms of general-purpose government in the 18th century. Although the functions of governments converged in the 20th century, the creation of single function special districts and authorities increased layering and complexity. The report quotes from the 1961 book 1400 Governments by Wood and Almendinger, who described the New York – New Jersey – Connecticut metropolitan area’s system of governance as “one of the great unnatural wonders of the world…more complicated than any other that mankind has yet contrived or allowed to happen.” A further quote from political scientists Gerald Benjamin and Richard Nathan noted, “Because localism has significant political value, changes typically are made by adding on, not replacing, existing local governments…attempts to eliminate local units are just too costly politically. Adding on is easier and politically safer.”

The Long Island Index study goes on to analyze the cost differences between the two areas, some of which are the result of bargaining unit gains in New York and some due to schools, which is not part of LUARCC’s mission. However, the basic concept is that a county-based centralized system is far more cost effective. The researchers were concerned that Long Islanders, while concerned with the cost of government, might be more satisfied with the quality of service provided or the responsiveness enabled by more local units of government. To the contrary, Virginians are happier with the quality of their government services and feel that they could trust officials – no matter at what level of government -- to resolve a problem when it occurs. Not surprisingly, combining these differences in satisfaction with the higher taxes in Long Island, almost twice as many Virginians feel the value they receive from their property taxes is excellent or good.
When comparing fire services, the study also evaluated objective measures of service quality. Considering the insurance industry’s ISO ratings, fire response times and number of fire and EMS calls, there was no discernible difference between the two regions. Although Long Island’s population was a little over twice that of the Northern Virginia counties, Long Island has almost six times as many fire and EMS vehicles as Northern Virginia. The personnel costs in Virginia are about six times as high as Long Island’s, but Virginia pays its Fire and EMS staffs. The authors express concern about what will occur to overall costs when volunteers are no longer an adequate resource in Long Island.

The New York State commission that recommended ending compensation and perks for special district commissioners (Confessore, 2008) also recommended centralizing specific functions at the county level. Some of the functions included tax collection and emergency dispatch, as well as various back-office functions that support other services, such as the courts. This report extended its reach into the schools (Hildebrand, 2008), which are not the concern of LUARCC, but the concept is transferable and included municipalities as part of its recommendations for services that span both types of government. The report recommended coordinating at the county level functions such as telecommunications, computer services, and risk assessment and internal auditing, using the county comptroller’s office.

Centralized services are often part of a two-tier approach to providing services. Indianapolis is another example of mixed service provision from different levels of government (Rosentraub, 2000). The author describes the effort as including services delivered at a regional or county level, while others are delivered by the administration of smaller areas. For example, Indianapolis, through its centralized UniGov tier of government, provides street maintenance services for all residents of the consolidated city, but the independent cities (with far smaller populations) are responsible for their own streets and parks. Indianapolis provides police and fire services for the residents of its pre-UniGov service boundaries. Residents of areas beyond the old city of Indianapolis retain the right to receive police services from the sheriff’s department or to select another provider. Several of these areas contract with private companies for police patrols. Those areas that utilize private firms for police patrol functions rely on the sheriff’s department for other policing services, including criminal investigations. The Indianapolis Fire Department also provides services to the residents of its pre-UniGov service boundaries, whereas fire departments with service boundaries matching those of their respective townships supply service to residents in areas that joined Indianapolis as part of the UniGov program.

**Contractual Agreements**

The last form of alternate service delivery we will discuss is contracting. We have defined it to include any contract or agreement that transfers the full responsibility for the production of the service to another entity. It differs from centralized service provisions in this categorization because it does not include services provided by a larger
government entity for all its constituent members, such as a county-provided service that is available for all municipalities in the county.

Contracts include agreements with other governments, private for-profit firms, and non-profit organizations. When formed with other governments (shared services), the arrangements arise spontaneously and normally require no centralized directives or legislative changes. They are very varied and often can involve sharing skilled employees, capital equipment, information technology systems and equipment, or entire operational services. Because they do not compromise the independence of the governing bodies, they do not impinge on democratic representation or citizen engagement. If there are other alternative providers, the parties to these inter-local agreements can terminate them easily without significant cost, when they do not work as well as was expected. These arrangements have been discussed in the report on “Costs and Benefits of Service Delivery Consolidation among Municipalities” but are included here as one of the alternates to direct delivery of service.

Contracts are the most common form of alternate service delivery in the literature. (Stein, 1993). While governments provide most services directly, the proportion provided through other institutional arrangements was growing through the 1980’s (Joassart-Marcelli and Musso, 2005). The study showed the domination of outsourcing by contracts with other governments and by totally relinquishing the service to other independent governments, such as in the creation of special districts. Contracts can be terminated, but it is more difficult to end the relationship with an independent government formed as a special district. It is also more difficult to provide oversight to a special district, because a special district has both the responsibility to deliver (produce) the service and to budget for its provision. One of the interesting findings in this study, which looked at a number of the conditions and factors associated with outsourcing, was that grants reduce the need to outsource, because they reduce the local tax-based cost to provide the services directly.

Data from an ICMA (International City/County Management Association) survey of municipal restructuring (Warner and Hebdon, 2001) reveals that inter-municipal cooperation occurs in 55% of the cases, privatization in 28%, reverse privatization in 7%, governmental entrepreneurship in 6% and cessation of service in 4% of the cases. Inter-municipal cooperation in Warner’s context (other authors use it differently) refers to shared services achieved through a contract with another government to provide a service for a fee. Privatization is a contract with a non-governmental organization, either for-profit or non-profit. The reverse of that occurs when a government has decided that privatization was not as effective as was projected. Both reverse privatization and governmental entrepreneurship (also referred to as competitive contracting) provide new motivations and increased empowerment to municipal departments by allowing them to contract and compete, but they do not involve different organizational structures than those represented by direct services or inter-local contracts.

The literature has also studied the conditions that lead to contracting and the utilization of contracting. Not all studies agree on the existence or direction of the relationships.
Furthermore, the terminology used by different authors muddles the distinction between contracting and cooperative relationships between governments.

According to a study by Nelson “Municipal Government Approaches to Service Delivery: An Analysis from A Transactions Cost Perspective”, conditions leading to increased contracting are high relative salaries of municipal workers, homogeneity of age and education in the population, and smaller population size (Nelson, 1997). Contracting is increased if the municipality is in a more populated county or a metropolitan area.

A study by Warner and Hefetz (2002a), “Applying Market Solutions to Public Services: An Assessment of Efficiency, Equity, and Voice”, looks at restructuring in general. Although it includes contracting, the results are different. Larger townships and counties are more likely to restructure. Yet larger metropolitan places are less likely to restructure. The authors’ rationale that they have the least to gain from economies of scale does not comport with the prior finding. Furthermore, although contracting is related to lower expenditures per capita, this effect is greatest in the suburbs. Perhaps density is a confounding factor in these findings. Contracting is more common in higher income municipalities and in municipalities with more poverty. Lastly, although council-manager forms of government were more likely to contract in 1992, they were less likely to do so in 1997. The simple explanation that the contracting fad had run its course is appealing, but not proven by these findings.

Using the 2002 ICMA data, another author finds no correlation between population size and the joint production of services at the county level (Jeong, 2006). Jeong defines joint production mainly as governments contracting out to vendors. Other findings include that having elected county executives is related to increased joint production of public works projects, and that having robust fiscal resources encourages joint production of services.

The most common services contracted were public works, public safety, and administrative support. Governments select the private sector for the contracts for public works, transportation, and administrative support. Awards of contracts for health and human services and contracts for parks and recreation are more often to non-profits (Warner and Hebdon, 2001). Feiock, et al, made similar observations. Direct provision of the service in-house is much less likely for both public works services, as well as health and human services, than for other services (Feiock, et al, 2004).

Contracting allows municipalities to achieve economies of scale while retaining some control over service provision. Contracting with other governments increases the chance of contract success because it mitigates the risk involved in contracting with private firms or even non-profits (Brown, 2008). Hence, government contracts with another government those services that are more likely to risk failure in a contract. The cost of monitoring the contract can be high with private vendors. When failure does occur, it can be difficult for the government to extricate itself from the contract.
In a study of cities in the United States between 1990 and 1999, it was found that governments are not as concerned with monitoring the contract with another government. Their overriding concern is eliminating the cost of developing the service capacity directly (Shrestha, 2005). Past cooperation is a very important factor in maintaining inter-local cooperation.

The choice of for-profit vendors can be very limited for some services. Governments contract services with high asset specificity with other governments (Brown and Potoski, 2003a) or with non-profits, because they are willing to provide services that do not have as general an application, but may fit their agenda.

Contract failure was common in a study of the ICMA data from 1997 and 2002 (Lamothe and Lamothe, 2006). The most common reason for returning to direct service delivery was that service quality was not satisfactory (about 70% of the cases of reverse contracting), but insufficient cost savings was mentioned in almost 50% of the cases, and political pressure was cited in 20% of the cases.

A study of almost 15,000 nursing homes compared quality of the service delivered (Amirkhanyan, et al, 2008). The study found no difference in quality between non-profit and public run nursing homes. For-profit ownership correlated with significantly higher regulatory violations, that is, lesser service quality.

The ICMA administers a survey on use of other delivery options every five years. Comparing 1997 and 2002, services that were in-house tend to stay in-house (Lamothe, et al, 2008). Some services previously contracted out, however, move back in-house over the five years between the two studies. Cities with greater ability to manage contracts are more likely to prefer contracting. Where there are greater levels of competition, more contracting occurs, yet non-profits tend to be less involved. This is the corollary to the finding that governments choose non-profits more for services of high asset specificity.

Another study confirms these results (Feiock, et al, 2004), but with some additional specificity. Almost as many services were brought in-house in the five years (12.3%) as were contracted out (13.1%). The author also observes that contracting to other governments (which he terms vertical integration) is almost as common a method of outsourcing as privatization.

Contracting can promote efficiency (See Figure 1). Although the most expensive method for residential trash collection was private provision contracted by the resident, the least expensive was private provision contracted by the municipality. It is most cost effective, in this study, for the municipality to have responsibility for the provision, but not the delivery of the service (privatization).

A study of Buffalo suggested that re-engineering the delivery of services could reduce the local tax levy by 9%-13% (Center for Government Research, 2006). The proposal was for a two-tiered approach wherein the city would provide core governance and
administrative services but contract out for other services to the private sector or other governments.

Cheung (2008) has studied private governments in California in planned developments and condominiums. Local governments lower spending in response to private government activity. The services affected include police, fire, parks and recreation, solid waste disposal, and housing and community development. Generally, a private government has less potential to leverage economies of scale, so one anticipates that the overall costs might rise. From the government point of view, concerns include whether tax revenues might be reduced (not under current New Jersey law) or whether costs would be shared by the local government making direct payment to the private government (as New Jersey law requires, for trash and snow removal in apartments and condominiums).

**Hybrid Government Structures**

The traditional approach of government is to provide most services directly at the local level. Dividing services among the different levels that can best perform those services offers an improvement.

This report categorized alternative service delivery into five different mechanisms in addition to direct service delivery by the municipality. This simple categorization made it easier to describe the options, some of which are not found in New Jersey and may be uncommon in the United States. The literature provides some analysis of the relative benefits of each of these mechanisms, which the following chart, “Characteristics of Different Alternative Service Delivery Arrangements,” summarizes.
### Characteristics of Different Alternative Service Delivery Arrangements

<table>
<thead>
<tr>
<th>Characteristics of Service Delivery Mechanism</th>
<th>Regional Policy Groups</th>
<th>Joint Boards</th>
<th>Special Districts</th>
<th>Centralized Services</th>
<th>Contractor Provided Services</th>
<th>Directly Provided Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy – making authority</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Operational responsibility</td>
<td>No</td>
<td>No or limited</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Taxing or rate-setting authority</td>
<td>No</td>
<td>No, but with exceptions</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Availability of staff for policy research</td>
<td>Yes</td>
<td>Depends</td>
<td>Yes</td>
<td>Yes</td>
<td>N/A</td>
<td>Yes</td>
</tr>
<tr>
<td>Availability of other resources</td>
<td>From constituent municipalities</td>
<td>From constituent municipalities</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Potential benefit of economies of scale</td>
<td>Yes</td>
<td>Yes</td>
<td>Only if regional</td>
<td>Yes</td>
<td>Yes, depending on contractor</td>
<td>No</td>
</tr>
<tr>
<td>Prevention of additional fragmentation</td>
<td>Yes</td>
<td>Yes</td>
<td>No, and adds a government</td>
<td>Yes</td>
<td>Yes</td>
<td>No, but does not add a government</td>
</tr>
<tr>
<td>Retention of local control</td>
<td>Through representation</td>
<td>Depends on board definition</td>
<td>No, but through appointment</td>
<td>No</td>
<td>Yes, through monitoring</td>
<td>Yes</td>
</tr>
<tr>
<td>Simplicity of terminating arrangement</td>
<td>Yes</td>
<td>Yes</td>
<td>Difficult</td>
<td>Difficult, only with agreement</td>
<td>Depends on provider and contract</td>
<td>N/A</td>
</tr>
<tr>
<td>Number of municipalities served</td>
<td>Multiple</td>
<td>Multiple</td>
<td>Varies</td>
<td>All</td>
<td>Varies</td>
<td>One</td>
</tr>
<tr>
<td>Breadth of service focus</td>
<td>Multiple</td>
<td>Single, but with exceptions</td>
<td>Single</td>
<td>Varies</td>
<td>Single</td>
<td>Multiple</td>
</tr>
</tbody>
</table>
The categorizations in the chart are ideal types, that is, categories that make it easier to understand the relative benefits of each delivery strategy. The reality of government often blurs the lines between these service delivery arrangements. In some cases, governments have formed useful government structures with combinations of the features of different arrangements.

That is certainly true of two-tiered governments, one of the promising alternatives found in Monroe County, New York; Jefferson County, Louisiana; and Indianapolis, Indiana. The two-tiered government links service delivery to the appropriate level of government but maintains local control or oversight over the service. Hence, it is both more responsive and yet works more efficiently than directly provided local services. Joint boards and regional policy groups have achieved this by requiring local representation on a governing body that has access to greater and more efficient resources. British understatement suggests, “… the advantages of a two-tier system have been underestimated.” (Dollery and Johnson, 2005)

Sancton (2005) reviews two-tier governments in Canada over the last fifty years.

The basic theory of two-tier metropolitan government is simple: a metropolitan level of government is established for those functions of local government that require a metropolitan-level solution, usually metropolitan-wide land-use planning and major inter-municipal physical infrastructure; local municipalities remain in place to provide such local-level services as zoning and recreational facilities. As in a federation, the metropolitan (or upper-tier) level is not hierarchically superior to the local (or lower-tier) level. Each level has full autonomy to act within the legal authority allocated to it by the provincial legislation.

The detailed definition of the configuration of the tiers varies with each implementation. Further, the perception of success or failure also shows little consistency. An optimist may see this as indicating that, done right, very positive benefits will accrue.

On the other hand, Sancton (1996) lists the European cities in which a two-tier metropolitan government has been “at best controversial, at worst, unstable.” In his later work reviewing two-tier governments in Canada (Sancton, 2001b) he observes that in three of four two-tier governments with a directly elected upper-tier, the constant conflict between the two levels has led to consolidation into a single tier. Constant questioning of the slow and cumbersome system has beset the remaining government.

While there have been difficulties with two-tiered governments because of the political conflict that (almost) inevitably results from the very definition of the form, two-tier governments have attractive features that are hard to obtain in non-hybrid structures. In the same era that three other Canadian provinces created two-tiered forms that were later abolished, British Columbia made a conscious effort to avoid the political conflict by creating an upper-tier that was not a government. The regional districts continue to thrive.
British Columbia took pains to define the regional districts so they would not be perceived as another level of government (Sancton, 2005). Indeed, they replaced many existing special purpose bodies (special districts) and acted as an institution encouraging increased inter-municipal cooperation. They have flexible relationships with the constituent municipalities, allowing them to opt out of regional services. A Board of Directors, whose members are not directly elected, governs the regional districts. The Board consists of members of municipal councils who have varying numbers of votes on the Board proportional to the population they represent.

Sancton (2001a) presents the opposing views of advocates of consolidation and public choice in an article which analyses how urban growth leads to concerns about the most appropriate government structure. Many consolidationists consider a two-tier system superior to complete consolidation because it creates one government to manage the entire urban area. The size of the upper tier is a concern because different size governments best deliver different services. Public choice proponents provide evidence that some services, such as policing, are best provided over smaller areas. The two-tier approach at least provides two options within the same structure. In addition, it meets another concern of public choice theory, because it maintains a layer of local government that can continue to provide competing service and tax packages to prospective residents and businesses. Sancton remarks that the structure bifurcates the activities of existing governments, requiring coordination of two governments.

Some hybrid forms give up local control, but the hybrid can contain mechanisms of oversight built in to the service arrangement. Joint boards and regional policy groups are structures that attempt to provide that oversight for the benefit of local residents. One can meld these structures with some of the arrangements utilizing central or regional providers. Centralized services at the county level are effective and efficient and are the norm in some other states (for example, dispatching, fire, and emergency medical services). Regional forms of special districts (for example, water utilities) take advantage of economies of scale for services that benefit from larger providers. Mechanisms such as joint boards and regional policy groups can properly manage these services with adequate oversight on behalf of local residents.

Hybrid forms of service delivery have potential, if the coordination and political issues can be resolved, while providing oversight for the local citizens. The discussions above suggest places like British Columbia and Monroe County may have accomplished that. The literature indicates that in both of these situations, the development of a regional solution was consensual. A coordinating body comprised of representatives of the constituent municipalities maintained the on-going focus on local concerns combined with regional efficiencies.
COMMENTS ON THE LITERATURE

Some of the literature includes only contracted arrangements as types of alternate service delivery, at best giving only a brief mention to other forms. In addition, the literature concentrates far more on cataloging which governments are more likely to contract than it does comparing the efficiency of the results.

The description of the literature on alternative service delivery by Dollery and Byrnes (2005b) uses the term “nascent” and refers to an “embryonic body of research”. However, this is in contrast to the multiple studies SPAA found on contracting and the comparison of contracting to direct service delivery.

The gap is not principally one of a failing of the literature, but of the lack of experience with and knowledge of alternatives outside of contracting and shared services. If there is a void, the explanation is that the alternatives, such as centralized provision of service, are the norm in the states in which that mechanism has operated for so long.

The literature was disappointingly skimpy on estimating cost savings for different service delivery options. The most that can be drawn from the literature is that specifics of a situation will dictate what efficiencies are possible and how they are best achieved.

The biggest problem in the literature for alternative service delivery is the use of terminology. There is confusion between terms such as inter-local cooperation, inter-local agreements, and joint production. The discrepancies between Nelson’s findings and Warner’s findings demonstrate this problem. Nelson concentrates on contracting, but Warner uses restructuring, which includes contracting, as well as municipal aid and joint production. Jeong enters the fray by using joint production as a term including contracting out. The discrepancies between the authors appear in the relationships to a variable as basic as size, so there is evidence that there are differences in what is defined as restructuring and joint production of services. This review was not always able to resolve the inconsistent use of terms.

For some of the arrangements that are not common in New Jersey, the states or countries that have implemented such arrangements have laws that allow the forms to exist. For example, an article discussing options for a joint services model for streetscape services compared the legal basis for joint boards, joint committees, management boards, and Companies Limited by Guarantee. This report tried to avoid these legal distinctions in favor of discussing concepts.

In summary, while there is no reason to doubt the findings of the literature, in general, there is a concern about the inconsistent use of terms to describe alternative service delivery.
CONCLUSIONS

This report reviewed varied approaches to service delivery arrangements. However, it is not obvious from what is found in the literature how to compare these approaches, much less propose an optimal array of service delivery arrangements. This area of alternate structures for service delivery is new and evolving, which makes the task of developing concrete conclusions more challenging.

The literature highlights the following arrangements as providing efficient and effective solutions for delivering public services:

- **Contracted Services**
  
  Shared services can increase efficiency while retaining local control. The numbers show that a private contractor may be more efficient only if the municipality can monitor the contract adequately.

- **Special Districts Provide Specific Service Expertise**
  
  Special districts (authorities and fire districts, for example) provide a focused area of expertise, but possibly at the cost of greater fragmentation, redundancy of general administrative functions, and loss of accountability. Regionalized special districts mitigate the increase in fragmentation and redundancy, but make accountability more distant.

- **Centralized Services Provide Scale Economies**
  
  County or regional service provision is attractive for those services (infrastructure related or highly specialized) that show economies of scale, but there may be a need to provide representation of the constituent municipalities in order to assure local control.

- **Joint Boards for Specific Functions**
  
  Joint boards are effective for unique services that are best provided over a broader area (for example, land use planning and economic development) and may provide local representation in determining how the service will be delivered.

- **Regional Policy Groups Increase Local Control for Varied Services**
  
  Regional groups that are policy setting are very effective in providing local representation in an effort to collaborate and cooperate in providing services, but they depend on other structures to deliver the service directly. The Council of Governments in Monroe County, New York is an example.
Hybrid Arrangements to Promote Efficiency and Provide Local Control

Arrangements that combine adequate local representation with an array of service delivery mechanisms applied appropriately to each specific type of service may optimize the benefits of different delivery arrangements. Two-tier governments are a hybrid form. They often combine a regional board, composed of representatives of constituent municipalities, with local delivery for services such as police patrols and regional or county delivery for services like economic development and land use planning.

The literature indicates there is potential in each of these approaches. It is important to fit the mechanism for delivery to the service type. In his review of fifty years of evidence on the relationship between the structure and performance of local governments, Bish (2001) suggests:

… given the diversity of communities and local services, no single organization can perform all the tasks demanded of local government. Metropolitan areas composed of a multiplicity of local governments and production arrangements are more responsive to residents’ needs and generally provide local government services at less cost than monolithic amalgamations.
APPENDIX A -- ANNOTATED BIBLIOGRAPHY

Literature Review and Analysis Related to Optimal Service Delivery Arrangements and Local Government Efficiency

This commission report reviews the optimal structure of local government. The report declares that a multiplicity of general and special purpose governments contributes to democratic values and a coherent local public economy. The report distinguishes between the provision (that is, the determination of what) and the production (that is, the determination of how) of public goods and services.

This study focuses on "network effects" in the utilization of publicly-funded prenatal care. There is evidence that the use of public programs is highly correlated within groups that are defined using race/ethnicity and neighborhoods, and the correlations persist even when the study controls for many unobserved characteristics by including zip code-year fixed effects, and when it focuses on the interaction between own group behavior and measures of the potential for contacts with other members of the group ("contact availability"). This study extensively collects data from primary sources. The richness of the data allows the authors to control for omitted variables to a greater degree than many other non-experimental studies.

This study examines the extent to which interagency service delivery teams facilitate the implementation of a popular reform that significantly challenges the status quo: family-centered service delivery. Survey data from 121 providers representing 25 agencies within one county suggest that interagency teams may promote provider implementation of new service delivery practices. This study provides comprehensive, credible results, both quantitative and qualitative findings. Details about how ICC has been established, its operations, settings of the studied community were also explicitly elaborated. Given the moderately large sample size and the confirmation of results by focus groups, this study provides concrete evidence regarding alternative form of service provision in health care services. This study focuses more on how large organizations
can share responsibilities between agencies in that organization, but it could provide insight into regional health service or social service delivery.


This study explores the impact of organizational ownership on two complementary aspects of performance: service quality and access to services for impoverished clients. Derived from public management research on performance determinants and nursing home care literature, the hypotheses stipulate that public, nonprofit, and for-profit nursing homes use different approaches to balance the strategic tradeoff between two aspects of performance. Panel data on 14,423 facilities were analyzed to compare measures of quality and access across three sectors using different estimation methods. Findings indicate that ownership status is associated with critical differences in both quality and access. Public and nonprofit organizations are similar in terms of quality, and both perform significantly better than their for-profit counterparts. When compared to nonprofit and, in some cases, for-profit facilities, public nursing homes have a significantly higher share of Medicaid recipients.


This report outlines two alternative strategies for improving local government service delivery - the "high road," which uses new management innovations to increase internal productivity, and the "low road," which focuses on downsizing and contracting out. While other studies have focused on contracting out, this study provides a longitudinal look at contracting and presents detailed case studies of municipalities, which have brought back in house previously privatized services.


Developmental dynamics are everywhere, from legislative coalition formation to the evolution of interorganizational cooperation to intraorganizational renewal. It is extremely hard to analyze such developmental processes. However, the paper provides just a conceptual framework for developing collaborations for service deliveries. No empirical evidence is provided in the article. Readers need to refer to evidence discussed in a separate book-length volume (Getting Agencies to Work Together, 1998), which exhibited some gains from collaboration (e.g., minimizing costs).
Alternative institutional arrangements for building and managing facilities for provision of public services, including the use of the Private Finance Initiative (PFI), is modeled to explore the effects on innovative investment activity by providers. The desirability of bundling the building and management operations is analyzed, and it is considered whether it is optimal to allocate ownership to the public or the private sector. The study also examines how the case for PFI is affected by the (voluntary or automatic) transfer of ownership from the private to the public sector when the contract expires. It suggests that asset specificity and service demand risk play critical roles.

Bish, R. (2001). Local Government Amalgamations: Discredited Nineteen-Century Ideas Alive in the Twenty-First. Communiqué, C. D. Howe Institute. The twenty-first century will be one of rapid change and great need for institutional adaptability. Yet, in the critical area of the relationships among citizens, the civil community, and local governance, some provincial governments are imposing an intellectual fashion of the nineteenth century in the form of an almost religious faith in monolithic organizations and central control. This Commentary undertakes a comprehensive review of 50 years of evidence on the relationship between the structure and performance of local governments in metropolitan areas.

This news article discusses shared services in Boston, especially police services. This article uses a report that had been released recently on regionalization as a backdrop for the discussion of a new data-sharing system among five towns. The report investigated past failed attempts at regionalization and a successful consolidated 9-1-1 county dispatch system.

The debate in the UK on the reform of local government structure is poorly informed by empirical evidence. This article bridges part of the empirical gap by drawing upon analyses of structural effects in the USA. Two main dimensions of structure are outlined: fragmentation and concentration, both of which can vary vertically and horizontally. Fourteen structural hypotheses are identified and categorized as technical, competitive and political effects.

Empirical studies suggest that local service contracting leads to higher efficiency, which seems to support public choice arguments on the vices of municipal monopoly and virtues of competition. A methodological critique of the evidence shows that these conclusions are not valid. Major deficiencies of the statistical tests include the omission of relevant control variables and the absence of measures of competition.


Evidence from sixty-five empirical studies of the determinants of public service performance is critically reviewed. The statistical results are grouped on the basis of five theoretical perspectives: resources, regulation, markets, organization, and management. The analysis suggests that the most likely sources of service improvement are extra resources and better management. A research agenda for further work is identified, and recommendations are made to enhance the theoretical and methodological qualities of studies of public service improvement.


In November 2000, voters in the City of Louisville and Jefferson County approved a referendum to unify their two governments, effective January 2003. This report investigates the functions that are unaffected by the merger as well as evaluating departments whose fate has been left to the determination of the Metro Mayor and Council. Building on a superb body of local data collection and analysis, the document seeks to present the new Regional City of Louisville with its first complete look at itself as it embarks on merger, in order to help it define a new vision of competitiveness. To that end, the report endeavors to provide a new map of the critical demographic, land use and economic trends altering the new city, and then follow up with an agenda of potential policy choices that will help the region shape the trends to its benefit.


Governments not only choose which services to deliver to citizens, but they also choose how to deliver those services. Governments can produce services themselves or through a variety of external production mechanisms, including contracting with other governments, private firms, and non-profit agencies. This article applies a transaction cost framework
complemented with institutional and market theories to examine governments’ service production decisions. A 1997 International City/County Management Association survey shows how governments choose service production mechanisms to manage the transaction costs inherent in delivering different types of services.


Under pressure to do more with less, governments across the country have moved from direct service provision to providing services by contract. Proponents argue that contracting can reduce costs and improve flexibility and customer satisfaction. Critics point to a growing number of failed contracts, arguing there are numerous pitfalls associated with contracting. Missing from these debates is a discussion of how governments’ managerial capacity can improve contract performance. This article identifies specific capacities that governments can use to harness the promise of contracting while avoiding its pitfalls. It presents analyses of data on municipal and county government contracting activities that show how governments invest in contract-management capacity in response to several internal and external threats to effective contract performance. Because government investment in contract management capacity is uneven - that is, some governments invest in less capacity, even when circumstances would call for more - our analyses may help to explain why some contract arrangements are more successful than others.


This paper explores the dynamics of government-to-government contracting at the local level in order to examine how governments’ shared organizational characteristics, notably a governance structure based on political accountability, potentially make them more attractive vendors for services that risk contract failure. Relying on panel data from the 1992 and 1997 International City/County Management Association’s (ICMA) Alternative Service Delivery surveys along with data from the U.S. Census and other sources, this paper identifies service areas in which governments most frequently turn to government vendors. In particular, a comparison of public works and transportation services - service areas with low risks of opportunism leading to contract failure - and health and human services - a service area with high risks of opportunism leading to contract failure - shows that contracting governments are more likely to utilize governments over private firms and non-profits for high-risk services. This is not the case for low-risk services, suggesting that governments view other governments as trusted contract vendors.

A model of observing public service delivery choice in the presence of economic expansion is presented. Regression techniques were used to estimate the share of county population served by volunteer fire protection from variables measuring community demands for and relative costs of fire protection services. The study reviews factors determining use of volunteer versus paid firefighters.


This newspaper article examines a report which was about to be released by Nassau County, which provided estimated cost comparisons between garbage collection services controlled by the town or controlled by the sanitation district within the county. It provides an estimate of the overall cost savings in the county if towns controlled the service and gave some comparisons for specific communities.


This government consulting firm reviews some of their experience with municipalities in New York State regarding shared services in various counties. The review includes developing a two-tiered government approach involving private contracting, consolidation of fire and police services, and other agreements brokered between counties and cities. The article discusses various service types in different size entities.


This is the detailed article for the Executive Summary report titled: A Case Study Comparing Governance, Taxes and Local Services on Long Island and in Northern Virginia: Executive Summary, which is listed under the Long_Island_Index. The notes below only contain findings not already recorded for the Executive Summary. According to the Long Island Index 84% of Long Islanders believe that high taxes are an “extremely” or “very serious” problem and a near majority (45%) cites it as the major local problem. With an eye to finding out how other regions address the issue of local taxes, the Long Island Index compared Long Island to several peer suburban regions and found one stood out in stark contrast to ours. Northern Virginia (including Fairfax County, Loudoun County, Fairfax City and the city of Falls Church) has significantly lower per capita property taxes than Long Island and a dramatically different governance model with 17 governmental entities delivering the full range of services on a county-wide basis compared to Long Island’s 439 governmental entities delivering
similar services. In order to explore this question, the Long Island Index commissioned two studies. First, they asked the Center for Governmental Research (CGR) in Rochester, New York to conduct an analysis that compared local taxes in each region in order to clarify the key cost drivers. Second, they asked Stony Brook University’s Center for Survey Research to conduct a survey comparing how residents in the two regions felt about the services provided by local governments. They found there was the potential for greater cost savings coupled with higher satisfaction.


Private governments, found in planned developments and condominiums, are increasingly common methods of delivering local services to residents. This paper provides the first empirical study of their impact on local public finance. A novel data set of homeowners’ associations allows construction of a panel of private governments in California. Panel methods test whether public expenditures respond to private government prevalence. The study employs a very large data set, 110 cities with 38-year time series, yielding reasonably convincing results.


The deterioration of the supply of public infrastructure throughout the United States has been found to be accelerating. The reason most often cited for the increasing rates of deterioration is the lack of available funding, or fiscal stress, present in many local governments. A popular short-term solution to fiscal stress is to defer infrastructure repairs and/or replacement programs. This is particularly true in rural areas where a declining agricultural base and redirected federal policy have placed significant downward pressure on revenues. The search for a long-term solution has renewed the debate about the optimal size of local governments. The research reported here examines the issue of size efficiency in the production of low-volume rural roads in the Midwest. At issue is the ability of Midwest townships to realize size economies. Overall, size inefficiencies were identified, which suggests that cost savings may be realized from the reorganization of the production of low-volume road services.


The cost of producing the same good often differs substantially for public and private producers. The study investigates the effect of organization in a case where the production technology is simple: The cleaning of Danish schools. Three forms of organization are used: decentralized municipal, central municipal or private.

This article is a case study set in U.K. regarding shared services and partnerships when three local U.K. councils came together to reduce cost and share services. Taxes and revenue sharing are discussed as well as the intricacies of U.K. partnerships. Different stages of the partnering are discussed as well as the success factors and lessons learned.


This news article describes the recommendations for sweeping changes to local government across the State of New York, which could save $1 billion a year. The report targeted special districts and other governments distinct from county, city, town, and village governments, that have appointive jobs and which Governor Paterson referred to as "patronage mills." The report recommended centralizing many services. It also recommended the State Commissioner of Education be given the power to order the consolidation of school districts. It was criticized by union leaders and school superintendents. Most recommendations will require approval by the legislature.


The research reported here examines the ability of a sample of Midwest township officials to produce low-volume rural road services in an economically efficient manner. Farrell-type measures of input use and scale efficiency are reported. Results suggest that over 50% of costs may be unnecessarily incurred because of input use inefficiency. Correlation between output measures and the efficiency measures suggests that larger jurisdictions are more efficient than smaller jurisdictions. In addition, 84.5% of the townships exhibit technology characterized by increasing returns to scale. These results suggest that jurisdictional consolidation of production-related responsibilities may yield substantial cost savings.


Structural limitation and narrow managerial capacity have consistently hampered both an effective and efficient decision-making process in small rural governments. Due to small size and relative isolation, rural governments are inherently limited in developing either effective policy or efficient delivery systems. These structural barriers have prevented many rural public officials from developing the capacity, resources, and expertise needed for managing increasingly complex problems. This
article provides a brief review of the performance measurement literature and suggests an alternative approach to assessing the efficiency of producing local public services. The proposed method seeks to incorporate microeconomic theory into the measurement process. The case of producing low-volume rural road services in the Midwest is examined to illustrate the method. The data used to study managerial efficiency in the production of rural road services were gathered from a mail survey of Illinois, Minnesota and Wisconsin township road officials and the 1982 Census of government (Chicoine and Walzer, 1984). The sample contains 435 independent observations of Midwestern townships.

(p.362)


This report of the Australian government examines various structural reforms. Typically, economic approaches to local government performance improvements take one of two forms. In the 'conventional' view, large, hierarchical, multipurpose organizations are seen as the best way to organize local public services. This approach argues that in a 'consolidated' structure, all services are provided by a single unit that covers a wide geographical area. Economic arguments usually advanced in support of this view include economies of scale, economies of scope, administration and compliance costs (Dollery & Crase 2004). The 'public choice' perspective that has gained prominence in the last 40 years provides a sharply contrasting view. Proponents argue that efficiency and responsiveness are enhanced by local government structures that are based on markets and competition rather than on structural and administrative consolidation.


Structural reform chiefly through council amalgamation has long been the most favored means of enhancing municipal efficiency by Australian state government policy makers. However, the disappointing results of most amalgamation programs have led to a growing skepticism in the local government community and a search for alternative methods of improving council efficiency. Not only have scholars designed generic models suitable for Australian conditions, but individual councils and group of councils around the country have also developed several de facto alternatives to amalgamation. An embryonic body of research has now begun to examine the efficacy of these alternative organizational arrangements. The present paper seeks to augment this nascent literature evaluating the outcomes achieved by Walkerville; an Adelaide suburban council that escaped the 1998 South Australian merger program.

Broad consensus exists in Australian policy circles on the need to enhance the efficiency of local government. However, the question of the most appropriate model for local governance remains controversial. Quite apart from larger amalgamated municipalities, a range of promising alternative options can be identified that may be able to effectively combine more efficient service delivery with vibrant local democracy.


This newspaper article presents some cost savings estimates from a study by MGT of America evaluating the consolidation of county and city fire departments in Pinellas County, Florida. This report was presented to the County's Charter Review Commission. MGT recommended that the county form a single fire district.


It is almost axiomatic that local governmental institutions, if they are to cope successfully with the problems of urbanization, require extensive reform. For many services, greater decentralization seems in order. For others, such as transportation planning, effective metropolitan government would be desirable. However, proposals which fail to recognize the impact of institutional change on redistribution, as well as on allocative efficiency, risk irrelevance. Successful reform requires a greater understanding of the nature of local government in an urban environment. The model presented in this paper, though an extreme simplification of reality, is offered as a step toward providing that understanding.


The authors discuss the different political lenses through which privatization is viewed. They emphasize pragmatic privatization as a means of cost-cutting, tactical privatization as a way of rewarding allies, and systemic privatization to change institutional structures and societal ideologies. The article primarily focuses on systemic privatization.


Tremendous attention has been given to contracting or outsourcing service productions. What has gone virtually unnoticed is that many of these services have experienced "vertical integration of production" where the service is taken in-house by the providing government. Building on
three typologies of service characteristics that are prominent in the literature, the authors examine whether vertical integration is systemically associated with certain types of goods and test whether the likelihood of vertical integration increases when mismatches occur between the service types and the modes of service delivery. Vertical integration can also be a response to market conditions, capacities for production and administration within government, or political, preferences of public decision makers. Vertical integration is the product of transaction problems relating to the characteristics of goods, production agents, and markets.

Gordon, N., and Brian Knight (2008). "The Effects of School District Consolidation on Educational Cost and Quality." Public Finance Review 36(4): 408-430. This study examines the effects of both whole-grade sharing and administrative consolidations of local school districts in Iowa in the 1990s, the majority of which were induced by state fiscal incentives. The study finds no effects of either sharing or consolidation on the pupil-teacher ratio, enrollments, or dropout rates. Although the study lacks detailed quality data on student outcomes, the findings suggest an absence of efficiency gains from either whole-grade sharing or consolidation.

Greenblatt, A. (2006). Little Mergers on the Prairie. Governing Magazine. This article examines how Iowa has addressed the concern that it has more government than it now needs. Iowa has 3,000 cities and towns, 99 counties as well as special districts. The Governor proposed to replace all local governments with 15 regional governments. With a stagnant tax base, Iowa has few options. The Governor's proposal was met with resistance, but, on a positive note, Iowa municipalities are working more together. "For local officials, saving a lot of money right away isn't as great a concern as doing things more efficiently when they can, whether that means streamlining internally or reaching out to new partners."

Gunderson, M. (2008). In Tough times, officials eye shared services Regional strategy touted as efficient. The Boston Globe. Boston: 3. The news article reports on a conference in Worcester, Massachusetts on regionalizing government. The conference, sponsored by the Massachusetts Municipal Association and Northeastern University, had 200 attendees. The article presents the differing perspectives of some of the local government officials in attendance. The President of the association remarks on some legislative impediments to regionalization and cooperation.

This paper examines factors influencing contracting out and contracting back. Empirical evidence shows local government contracting is a dynamic process that includes movements from public delivery to markets and from market contracts back to in-house delivery. This "reverse contracting" reflects the complexity of public service provision in a world where market alternatives are used along with public delivery. The authors develop a methodology to link responses to national surveys and create a longitudinal data set that captures the dynamics of the contracting process. They present a framework that incorporates principal agent problems, government management, monitoring and citizen concerns, and market structure.


Literature from various fields has vigorously debated the value and effects of fragmented and decentralized government systems versus consolidated and centralized systems. The different policy and theoretical arguments often target local governments in metropolitan regions. Some claim that fragmented and decentralized government structures are more efficient and accountable in these settings, while others argue that consolidated and centralized structures facilitate equity, are better able to solve region-wide issues, and are more efficient under some circumstances. The wealth of empirical research on this subject favors fragmentation and decentralization with respect to total local spending, but the results are mixed and the measures of these concepts vary greatly. This study documents and organizes the varied measures of fragmentation and decentralization, and applies this scheme to summarize the findings of 18 empirical studies that examine the effect of such structures on local government spending in the US. The study then uses these measures to examine the relationship between fragmentation / decentralization and total local government spending in the 41 largest (population) metropolitan regions in the US.


Privatization proponents explain its eruption on the national government's agenda by reference to objective economic interests of the state, linking it directly to goals of efficiency, competition, innovation, and deficit reduction. But an exclusive focus on economic forces obscures the intensely political nature of the privatization movement. Privatization initiatives are political because they redistribute costs and benefits among diverse and competing groups.
Hildebrand, J. (2008). Plan would pool school resources; Nassau-paid report, due out today, to show county agencies can help cut school costs by sharing services. *Newsday*. The news article covers the contents of a report about to be released by the Nassau County (New York) Executive on cost savings that could be realized through pooling back-office functions at the county level. The report was prepared by consultants hired by the county. It emphasizes specialized administrative services, such as legal, auditing, telecommunications, information technology, and transportation would be handled more cost effectively by using county resources.

Ho, A. (2004). Lessons from Past Consolidation Efforts, The Center for Urban Policy and the Environment. This Powerpoint presentation reviews consolidation attempts since 1805 in the United States, with particular attention to those attempted since 1990. It examines the efficiency argument for consolidation and evaluates other benefits that may accrue from consolidation.

Jeong, M.-G. (2006). Public and Private Joint Production: Institutional Theory of Local Governance and Government Capacity. *Annual Meeting of the Midwestern Political Science Association*. Palmer House Hilton, Chicago, Illinois: 1-27. The question of who should provide public services has continued to gain attention among scholars and practitioners. By focusing on the ‘make’ or ‘buy’ decision, most studies are conspicuous in their lack of addressing joint production, especially at the county level. This paper fills the research lacuna by incorporating institutional theory of local governance and government capacity. Using the 2002 ICMA Survey on Local Governments’ Alternative Service Delivery, this paper examines what factors determine the adoption of joint production of public services at the county level. Probit analysis is employed to estimate county choice of joint production in 2002. Overall, the preliminary analysis suggests that the reformed counties increase the likelihood of joint production adoptions. The findings also suggest that government capacity has a modest influence on joint production.

Joassart-Marcelli, P., and Juliet Musso (2005). "Municipal Service Provision Choices within a Metropolitan Area." *Urban Affairs Review* 40(4): 492-519. The authors investigate the decision of municipal governments to outsource the provision of public services during the 1980s and 1990s—a period of increased responsibility for municipalities. This study extends previous empirical work on outsourcing by distinguishing the type of outsourcing used (e.g., public, private, or other types of providers) and treating the outsourcing decision as a dynamic choice. Institutional characteristics and fiscal stress are found to play an important role in explaining service choices. Multinomial logistic regressions indicate that outsourcing was more common for poor cities than for wealthier ones, with
the former often relying on government agencies and the latter opting for privatization. Throughout time, these choices are likely to reinforce interjurisdictional patterns of disparity in service quality and costs.


Canadian federalism has experienced considerable pressure for change and innovation in recent years. There have been calls for more collaborative federalism and demands for public sector reforms consistent with the precepts of New Public Management. This article examines the hypothesis that these pressures might be expected to have resulted in some intergovernmental institutional innovation in the arena of federal-provincial-territorial relations. Using a conceptual distinction between federalism, intergovernmental relations, and intergovernmental management (IGM) as the basis of analyzing institutional innovation at six levels in the Canadian intergovernmental administrative state, the authors find a differentiated impact with more institutional innovation evident at the micro levels of IGM and innovation more constrained at the macro levels of the administrative state by the traditional institutional infrastructure of executive federalism.


Local governments in Monroe County are caught in the convergence of several trends that are producing current and projected multi-million dollar budget deficits in the two largest governments - the city and the county - and have strained town, village and school district budgets as well. These trends are (1) the rising cost of government at all levels; (2) a stagnating local economy; and (3) high local taxes. The primary objective of this report was “To inform and update the public about opportunities to make government more effective and efficient through cooperation, collaboration, and/or consolidation.”


This article reviews the literature on size and evaluates the effectiveness of consolidations. The article begins by stating that fragmentation is usually assumed to be inefficient, but remarks that there is a growing body of evidence indicating that this conventional wisdom may not always be true. It compares the arguments for and against consolidation and reviews some of the research and case studies. The article suggests alternatives to consolidation that may provide alternative paths to efficiency.

The study employs a quasi-experimental design to assess the operational costs and benefits of a consolidated department. It uses a comparison group consisting of eight police departments in a contiguous county in rural Pennsylvania to compare the outcome variables. Northern York County Police Department, the experimental group, consolidated in 1972.


This article examines the relationship between “contract failure” (the bringing “in-house” of previously contracted services) and service characteristics. The connection between contract failure and nonprofit and for-profit status is also explored. The analyses are performed using International City/County Management Association data and three service typologies constructed by previous scholars.


While scholars of local service delivery arrangements are fully aware the process is dynamic, research has tended to take the form of cross-sectional studies that are inherently static in nature. In this article, the authors model the determinants of production mode accounting for past delivery decisions. They find, not surprisingly, that there are strong inertia effects; previous delivery mode is a strong predictor of the current service delivery arrangement. More interestingly, the impact of the transaction cost nature of services on production choice is conditioned on past decisions, such as the extent of contracting and the type of vendors used. There is also evidence that contract management capacity and the competitiveness of the contracting environment are influential.


In recent years, analysts have begun to study cooperation on public services among local governments. These studies often have concluded that services with scale economies are likely candidates for shared service delivery. This article contributes to the emerging literature on this topic by examining inter-local service arrangements for 10 public works services in Michigan. The authors use data on the service delivery arrangements from
468 general-purpose local governments in Michigan to examine the role played by the factors in explaining inter-local cooperation on public works.

This news article reviews the deliberations of the Pinellas County Commission in Florida to close a fire station as a cost saving measure. There has been a concern for some time about the duplication caused by two similar stations that serve adjacent areas and have a low volume of calls. The boundaries of fire districts would be re-aligned. The writer interviewed fire officials from the effected fire stations, officials from neighboring districts and county officials to present different perspectives in the controversy.

According to the Long Island Index 84% of Long Islanders believe that high taxes are an "extremely" or "very serious" problem and a near majority (45%) cites it as the major local problem. With an eye to finding out how other regions address the issue of local taxes, the Long Island Index compared Long Island to several peer suburban regions and found one stood out in stark contrast. Northern Virginia (including Fairfax County, Loudoun County, Fairfax City and the city of Falls Church) has significantly lower per capita property taxes than Long Island. In order to explore this question, the Long Island Index commissioned two studies. First, they asked the Center for Governmental Research (CGR) in Rochester, New York to conduct an analysis that compared local taxes in each region in order to clarify the key cost drivers. Second, they asked Stony Brook University’s Center for Survey Research to conduct a survey comparing how residents in the two regions felt about the services provided by local governments. They found there was the potential for greater cost savings coupled with higher satisfaction.

Luzerne County (2005). Luzerne County’s Municipal Cooperation Community Toolkit 2005 Shared Service Success Stories
This newsletter speaks about the various shared services initiatives throughout Luzerne County in Pennsylvania and speaks specifically about the police departments initiatives. Shared services success stories such as the police department and recreation parks are also explored and expanded upon. The newsletter describes the fire department’s initiatives with shared services.
This paper is about the current thinking in metropolitan governance in Jordan. In 1985, a number of municipalities and village councils around Amman City were amalgamated to form what is known today as the Greater Amman Municipality. Since its inception, creating a metropolitan authority in Greater Amman was presented as a solution to a technical problem, the multiplicity of administrative units. Although one cannot connect the assumed success of this new municipality to this process of amalgamation, it is often described as such. Accordingly, amalgamation is presented in Jordan as a solution to the problem of governance in metropolitan areas. Greater Amman became a model for good governance. Steps toward implementing this model around other major cities were taken recently. This paper presents the rhetoric that produced such conclusions and argues that the idea of a unified metropolitan authority is rather a “practice” that preceded the existence of the problem.

This newspaper article from Sydney, Australia quotes the local government minister on the formation of alliances between metropolitan councils. Alliances are operating in 13 regions. Alliance boards would consist of representatives from all member councils to govern over the council groups.

The National Academy of Public Administration sponsored this report which studied every governmental unit within the irregular boundaries of Monroe County, New York, except school districts, and makes recommendations concerning them -- how the governmental services should be delivered and who should deliver them; how the representative bodies should be structured; how the financial impact should fall upon people; and how all of that could be implemented.

Onondaga County in New York State investigated: 1) the experiences of municipalities around the country in their successful attempts at intergovernmental consolidation and cooperation, 2) data on expenditure and dedicated personnel by municipality in Onondaga County, 3) assessment of applicability of efforts in other parts of the country to Onondaga County,
and 4) functional areas in the 36 municipal governments in the county that may lend themselves to cooperation and/or consolidation. This article summarizes what has been happening in Onondaga County, New York with regards to many types of municipal reform efforts including shared services and consolidation.


This news article reviews the presentation of a voluntary audit of Washington Township, New Jersey conducted by the New Jersey Department of Treasury. The audit identified some savings that would be possible by consolidating services at the county level. It also recommends contracting buildings and grounds maintenance services.


The author investigates whether the public preference for locally provided public services accounts for the differences in local government structures. The impact of state regulations on government structure is also examined.


Municipal governments are less likely to contract out for service delivery if citizen preferences for the service are heterogeneous. This conclusion is based on an analysis that extends to the public sector the empirical industrial organization literature on transaction costs and the "make or buy" decision faced by private firms. Service delivery practices for sixty-three municipal services are examined. The findings are consistent with the proposition that the cost of writing and monitoring contracts may be an important consideration in municipal service delivery approach and that bureaucratic supply may not be as inefficient as some previous studies indicate.


This study presents an analysis of municipalities -- cities, towns and villages -- including a statistical regrouping that suggests what a modern classification system might look like if we started from scratch today, based on current conditions. What emerges is an intuitively satisfying reassignment of cities, towns and villages into groups far more homogenous than the current legal designations. Big cities and immense urban towns group together, as do the smaller cities, larger villages and
other urban towns. Suburban and rural areas emerge naturally. This analysis provides an illustration that suggests it may be time to refocus attention on the basic structure of local government, including State laws covering service provision, governance, revenue structure, intergovernmental aid, and the provisions under which municipalities may merge, dissolve or annex territory. A number of studies have already described problems and potential improvements in these areas (many of which are cited in this report). With today’s heightened focus on local government efficiency, it makes sense to take another look at some of these basic issues.


In this paper several examples of government contracts with private firms are examined to see how experience conforms to a principal-agent model of cost minimization via competitive bidding and how important are the many qualifications to the model. The competitive theoretical model is examined through a review of fifteen examples of government contracts with private firms. The paper focuses on the implementation phase of private contracting, including how the obstacles to privatization are dealt with.


This article describes the successful UniGov program, uniting the city of Indianapolis and Marion County in central Indiana and outlines "lessons learned" for other communities considering such a consolidation effort. Through this consolidation, the city of Indianapolis was transformed from what was described by its chamber of commerce in the 1970s as "a cemetery with lights," into a destination for those seeking a vibrant downtown area and a major sports center, as well as the nation’s 12th largest city by the 1990s. Indianapolis was one of the three major consolidation or merger experiences in the 1960s and 1970s. Indianapolis’s specific contribution to the experiment in governance models was a city-county consolidation program that concentrated a limited or select group of urban services at the regional (defined as county) level while permitting most other critical urban services to be delivered by administrations and agencies serving different, often much smaller, areas within the county.


Evaluating the effects of a change in public policy setting is a critical element in the chain of accountability. Factors such as effectiveness and
efficiency in government operations are often difficult to measure. In this study of efficiency outcomes, the authors follow events before and after significant structural change arising from local authority amalgamation. The study focuses on highway maintenance and uses Data Envelopment Analysis (DEA) to evaluate whether greater efficiency was achieved. Results (confined to highway management activities) show no evidence that amalgamation was justified in terms of diseconomies arising from smallness (i.e. increasing returns to scale). While new governance practices introduced contemporaneously lifted the level of performance of local authorities in terms of higher technical efficiency, there is no evidence that the amalgamation policy contributed to this improvement. The policy impact evaluation methodology developed in this paper has potential for application to other local government service activities.


Notwithstanding a lack of interest by cost-cutting governments in Britain and the United States, municipal consolidation has emerged in at least three Canadian provinces - New Brunswick, Nova Scotia and Ontario - as a significant government priority. There is no academic evidence to suggest that consolidation produces savings. This article examines the various studies that have accompanied the consolidation efforts in the three provinces and finds them inadequate and flawed. Government reports in New Brunswick have tended to point more to non-financial benefits from consolidation, but the creation of the single-tier Halifax Regional Municipality in Nova Scotia has been justified primarily in terms of projected cost savings. In Ontario, the "Common Sense Revolution" commits the government to reducing overlap and duplication but not necessarily to consolidation. A ministry study of one Ontario municipal amalgamation purports to demonstrate savings, but the conclusions are questionable. The report of the task force on the Greater Toronto Area is significant because it specifically rejects claims that lower-tier amalgamations will save money and because it points to the benefits of municipal competition. Reducing the number of municipal governments does not necessarily mean less government.


Drastic change was contemplated by The Common Sense Revolution (CSR), the election manifesto that brought Mike Harris to power as premier of Ontario in 1995; the Harris government implemented drastic change; therefore the CSR explains what the Harris government has done. The fact that this syllogism is logically flawed should be obvious. The aim of this paper, however, is to go beyond formal logic and show
that, with respect to the Harris-government's municipal policies, its substance is flawed as well.


As the previous discussion has shown, it is quite possible for a single urban area to evolve in such a way that it contains many separate municipalities. Adjoining rural municipalities might have become urban over time; new urban municipalities might have been established within a former part of a rural municipality; two previously distinct urban areas might have grown into each other; or all or some of these processes might have occurred simultaneously. Ever since the mid-nineteenth century, there have been politicians, civil servants, academics, and sometimes even real-estate developers who have observed such phenomena with growing concern. They began to refer to the increasing number of municipalities within a single urban area as "fragmentation." This article discusses the need for redrawing municipal boundaries, particularly in light of different demands for service in rural and urban communities.


The new regionalism in the United States emerged because the old regionalism proved politically impossible to implement. For Canadian cities, however, provincial legislatures frequently imposed various institutional reforms of the type favored by the old regionalists. The first section of this article points out what it is that American new regionalists and Canadian policy-makers should have learned from the results of the old regionalism as it was implemented in Canada. The second section examines the relevance of the new regionalism for Canada. For those who still accept the tenets of the old regionalism, the new variety will seem irrelevant, if not counterproductive. But, for others, the new regionalism will provide a new perspective for analyzing old Canadian problems. The article's third section shows that, in some respects, Canadian cities have already gone further in implementing new regionalist principles than most American and Canadian analysts have recognized. The relevant institutions that are examined briefly in this section are the Greater Vancouver Regional District (GVRD), the Greater Toronto Services Board (GTSB), and the Montreal Metropolitan Community (MMC).


The first part of this article explores the historical background to municipal amalgamation. The second looks at what has been happening in the United States. The third briefly describes the recent Canadian amalgamations and the conclusion examines their potential impacts. Since the early 1990s, municipal amalgamations have taken place within
the following major Canadian cities: Sydney and Halifax in Nova Scotia; Toronto, Ottawa, Hamilton, and Sudbury in Ontario; and Montreal, Quebec City, Hull, and Longueuil in Quebec. The temptation is to assume that, like so many other changes in public policy in this period, such amalgamations are simply part of a worldwide trend relating to neo-conservatism, globalization, and/or the apparent victory of capitalism over socialism. Nothing could be further from the truth. With the exception of controversial municipal amalgamations in Melbourne, Australia and in post-apartheid South Africa, it is only in Canada, among western developed nations, that municipal amalgamations have recently been high on the policy agenda.


This article briefly examines five significant Canadian developments with respect to the governance of metropolitan areas: annexations and mergers such that there is one main municipal government for the metropolitan area, two-tier metropolitan government, the amalgamation of two-tier metropolitan systems into a single municipality, demergers in Quebec, and the creation of flexible and innovative entities for metropolitan governance. Special attention is paid to the Greater Toronto Area, a continuous built-up urban area that transcends at least three metropolitan areas as defined by Statistics Canada. In the absence of any authority covering the entire metropolitan area, it now appears that the Ontario provincial government is becoming the key policy maker. As an example of a flexible and innovative form of metropolitan governance, the Greater Vancouver Regional District merits attention elsewhere in the world. Canada’s experiences with so many different institutional arrangements in recent years means that there is much to be learnt from their obvious failures and occasional successes.


New Regionalism differs from past metropolitan reforms. Historically, local government reorganization was promoted as a way to enhance efficiency in metropolitan service delivery. Now metropolitan reform aims to reduce disparities between the cities and their suburbs and enhance the ability of the city region to compete in the global economy. There are two main routes to New Regionalism and regional governance: (1) metropolitan consolidation, which represents a government strategy, and (2) metropolitan governance, which reflects a governance approach.
This paper examines the impact of the five-year-old effort by the Urban Mass Transportation Administration (UMTA) to force state and local transportation authorities to convert a significant proportion of their systems from public to private operation. This article uses the example of the Urban Mass Transportation Administration, which has mandated state and local transit authorities to privatize their operations, to illustrate that private sector delivery of public goods and services is not nearly as advantageous as its proponents claim. This article focuses on a federal agency.

This study explains inter-local fiscal cooperation among local governments in the provision of public goods and services. A panel data set from cities above 400,000 from 1990 to 1999 for sixteen services is employed to test the following hypotheses: 1) The higher the asset specificity of a public good, the greater the inter-local cooperation among cities will be found; 2) The higher the difficulty in metering of a public service, the greater the inter-local cooperation among cities will be found; 3) The higher the economies of scale benefits of a service, the more inter-local cooperation among cities will be found.; 4) The greater the local fiscal autonomy, the higher the inter-local cooperation among cities will be found.

This newspaper article reviews the beginning of operations of a regional fire department organized by five towns in New Jersey. The article reviews some of the obstacles in achieving the regionalization, mechanisms used to overcome or reduce the obstacles, and the expected cost savings.

In Somerset County, the Somerset County Municipal Managers Association (SCMMA), a professional association of municipal administrators working with the Somerset County Business Partnership (SCBP), is focusing on identifying the "roadblocks" that are inhibiting municipalities from furthering shared services with other towns, the school districts and the county. Somerset County’s towns have created a model shared services network that has experienced outstanding and unparalleled success. However, it is the belief of the SCMMA and the
SCBP that the more reachable areas to facilitate sharing have been accomplished and, at this point, “all the low fruit has been picked.” The obstacles that stand before municipalities are the significant legislative barriers that inhibit bringing shared services to the next level. This white paper makes an attempt to identify the “roadblocks” and to actively push for meaningful legislation that will streamline and facilitate the expansion of shared services.


Contemporary research on service delivery has been preoccupied with the issue of privatization. Specifically, the concern has been with whether a governmental or a nongovernmental entity is more effective and efficient in delivering publicly provided goods and services. This paper offers an alternative perspective on service delivery and examines the full array of institutional arrangements used by municipal governments to deliver different goods and services. These choices are related to characteristics of individual goods and services to derive a simple thesis. The way governments arrange for service delivery is a function of the scope and content of their service responsibilities.


Public policies addressing complex issues require trans-jurisdictional solutions, challenging hierarchical modes of public service delivery. Interlocal agreements (ILA's) are long-established service delivery instruments for local governments, and research suggests they are plentiful, with a majority of cities and counties involved in at least one ILA. Although ILA's are an established feature of local government operations, previous research is atheoretical, largely descriptive, and unsystematic. This article explores ILA's as social network phenomena, identifying the rationales and underlying values for various ILA's, central and peripheral actors, and brokering roles. In particular, the authors explore the utility of incorporating network exchange theory into public management network models to identify the relative power of actors in network exchange relationships. They find that a "norm of reciprocity" culture predominates an economizing value as the rationale for an abundance of service oriented policy networks that produce a picket-fence regionalism of ILA participation in the Kansas City metropolitan area.


Inter-local agreements have long been a useful tool for municipal and county governments to increase the effectiveness and efficiency of local
government services. Yet while they have a long history in practice, there is little empirical study of the nature and characteristics of ILA's, especially on a statewide basis. This paper presents results from a statewide survey of inter-local agreements in Iowa created in the period, 1993-2003. Results suggest that governments believe that their ILA's increase the effectiveness and efficiency of local services.


Three municipal amalgamations in three different Canadian provinces are analyzed and compared in this article. There is little evidence to show substantial cost savings from the merging of larger government units. Smaller entities studied in this article have realized financial benefits, while some larger jurisdictions that merge experience diseconomies of scale; higher wages resulting from a more specialized, professionalized bureaucracy; and the tendency to move to higher service standards. The authors conclude that consolidation will depend on the history of inter-municipal cooperation, financial arrangements, collective agreements, political structure, spatial organization, and political will to amalgamate.


Local government restructuring should no longer be viewed as a simple dichotomy between private and public provision. A 1997 survey of chief elected township and county officials in New York shows that local governments use both private and public sector mechanisms to structure the market, create competition, and attain economies of scale. In addition to privatization and inter-municipal cooperation, two alternative forms of service delivery not previously researched - reverse privatization and governmental entrepreneurship - are analyzed here.


Political fragmentation in metropolitan regions makes equitable and efficient delivery of public services difficult. Regionalism, although promoted as more equitable and rational, has found limited political support. Public choice theory argues, against regionalism, that political fragmentation can promote competition and efficiency by creating markets for public services. The authors assess the efficacy of market solutions for metropolitan public service provision by comparing privatization with inter-municipal cooperation and evaluating each on efficiency, equity, and democracy grounds. Using probit regression analysis of a national survey of local government service delivery from 1992 and 1997, the authors find
that both alternatives promote efficiency, but equity and voice are more associated with inter-municipal cooperation than privatization.


Using data from the ICMA surveys of alternative service delivery arrangements of local governments from 1992 and 1997 and data on poverty and income from the U. S. Census of Population 1990, the authors explore whether local governmental use of market forms of service delivery differs by metropolitan status. The surveys measured the form of service delivery for 64 different public services in seven broad areas: public works and transportation, public utilities, public safety, health and human services, parks and recreation, culture and art, and support functions. This article assesses the distribution of privatization and inter-municipal cooperation across localities in the metropolitan region and finds them most common among suburbs.

Weitzman, H. S. (2007). Cost Disparities in Special Districts in Nassau County This report analyzes what Nassau County residents pay for garbage collection, water and fire protection. It examined town-run and commissioner-run special districts, and the private companies that deliver water in many areas. The report shows that the cost to residents varies widely depending on where they live. Significant opportunities for saving taxpayers’ money exist.

Wilkins, J. (2000, 02/03/05). "Alternative Service Delivery Mechanism." Retrieved November 28, 2008, from http://www1.worldbank.org/publicsector/civilservice/alternative.htm. Restructuring is a prominent theme within the core of ideas comprising the New Public Management. There has been a growing challenge to traditional ministries and departments as the preferred organizational format to meet the goals of responsible government and good public management. Governments have experimented with alternative organizational designs because hierarchical, vertically integrated departments have proven too rigid and unresponsive in a public sector environment that is increasingly complex, turbulent, and demanding. Unbundling bureaucracy through Alternative Service Delivery (ASD) is an innovative response to the pressures of scarce resources and the public’s insistence on improved service. This is an introduction to the ASD. It does not contain any empirical evidence of the ASD implementation in actuality.

The main aim of this book is to link the workings of the governmental system with that of the economic system. While other studies conducted of the New York Metropolitan Region have traced the directions in which population and economic activities are moving, this book shows how the region's 1,467 governmental entities are influencing the process and how they may do so in the future. The book applies the statistical technique of factor analysis to the study of municipal finance.


There are a large number of multi-village water supply schemes (including regional schemes) in India. The prime motivation for setting up multi-village schemes is based on the desire to provide full water supply coverage to rural areas despite local water scarcity and increasing contamination of sources. In such circumstances, it becomes necessary to make use of distant water sources. However, treating and piping water from remote sources is often complex and expensive, and it is felt that the cost of supply can be reduced and options broadened through shared service provision.


Economic theories of the nonprofit sector suggest several different ways of understanding the relationship between government and private, not-for-profit organizations. In particular, different strands of theory support the alternative views that nonprofits (a) operate independently as supplements to government, (b) work as complements to government in a partnership relationship, or (c) are engaged in an adversarial relationship of mutual accountability with government. In this article, the analysis is extended internationally. The three theoretical perspectives are applied to four countries: the United States, the United Kingdom, Israel, and Japan, in an effort to illuminate nonprofit-government relations in those countries and to assess whether the multi-layered approach provides a substantially richer understanding than any one theoretical perspective.
SPPA employed a methodology for the literature reviews that consisted of thorough searches in all of the major databases representing social and policy journals. In consultations with SPAA faculty, the research associates used the knowledge from the early stages of the research to refine and expand the search, as was appropriate. SPAA created or used the following tools to assure we accomplished the aims of the Commission:

- LUARCC questions from the RFP
- Bibliographic databases
- Search terms specific to each report
- Reference database
- Annotated bibliographies
- Articles/web resources

In the first phase of the basic strategy, SPAA devised appropriate search terms and used them to search all the relevant bibliographic databases. Promising articles were recorded as citations in the reference database (EndNote®) and the full-text article content was saved to the article file (as a PDF).

In the second phase of the search, research associates assigned to the project thoroughly examined the articles for findings that addressed LUARCC’s questions. The research associates recorded each finding in the reference database, attaching it to the question it addressed and evaluating the degree to which the article or information resource substantiated the finding. The research associates completed this substantiation, weeding out articles based solely on ideology and rating the remaining articles according to the amount of evidence or the concreteness of the argument presented. During this process, team members reported any new search terms or resources they encountered to the project librarian and project director. Subsequent searches utilized this additional information.

The supervising faculty member assigned to this project and the project director reviewed the results of the first phase of the search, which found the potential articles. When necessary, they redirected the search to clarify information or find new sources. In addition, the faculty members and project director reviewed each finding for relevance to the LUARCC questions.

SPAA sought LUARCC’s input through the review of an outline of the proposed methodology to ensure that the literature search was comprehensive and focused on the questions LUARCC raised. Because of the iterative process used in the information review, the early results of our search enhanced the project tools further.
LUARCC Questions

SPAA extracted the questions from the LUARCC RFP into a spreadsheet and distributed it to all team members assigned to the project. The research team coded each of these questions with a Question ID, using the listing in the spreadsheet. This allowed the research associate to link a finding from an article to the question it addressed using the abbreviated Question ID. The questions and Question ID are in the appendix.

Bibliographic Databases

The Bibliographic Database appendix lists all the literature and news databases and other information resources, such as websites and books that SPAA used to find relevant information for LUARCC. The researchers and the project librarian knew certain resources were more comprehensive and relevant for this project. SPAA focused on *Lexis/Nexis Academic* as a resource for periodicals, including newspaper articles, journal articles, and legal documents; *Academic Search Premier* as the best resource for academic journals; *Business Source Premier* as a similar resource; and *Public Affairs Information Service* for government reports, monographs, and articles.

Search Terms

The search within the bibliographic databases and in other resources used the following terms:

- City-county agreement or service
- Outsourcing network
- Service outsourcing
- Service provider
- Service delivery
- Service jurisdiction/district
- Special districts
- Regional service/government/entity/district
- Authority
- County service
- Privatize
- Contracted service
- Competitive contract
- Regional planning
- Joint meeting
- Public/private partnership/organization
- Standardized service delivery
The searches always used the following additional governmental terms as limiters:

- Municipality
- Local government
- Borough
- Village
- Town
- Township
- City
- County
- State

Since the search engines differ in their filter capabilities (and the Boolean logic which drives some of them), the research associates used their familiarity with literature searches to make efficient search decisions. They focused on North American articles, cross-cultural studies that included the United States, or other articles, despite their geographic origins, if they were applicable to the subjects the Commission wanted to investigate in a New Jersey context.

Winnowing the search results while casting a broad enough net is not always easy, and never automatic, as our preliminary analysis showed. The research associates, with faculty guidance, used their expertise in the content area they investigated and their experience with literature reviews as doctoral students to make the searches practical and the results comprehensive and responsive.

**Reference Database – EndNote®**

SPAA summarized the important information from the articles and reports found in the literature searches in EndNote®, a high-quality bibliographic software program by Thompson Reuters. As part of its work products, SPAA will provide a copy of EndNote® to LUARCC with the on-line annotated bibliography for all five projects it completed. A printed copy of the annotated bibliography for this project is Appendix A to this report.

The findings are the core of the reference database and of this project. The findings contain a brief extract from the article or a summary of a key point that links the article to LUARCC’s questions. The following information is contained with the findings to provide a quick review:

- **Question ID** – this will contain a project designation and identify the specific question addressed
- **Finding** – a brief description of the finding, conclusion or discussion
- **Cases** – if it is based on an empirical study, the number of cases that support the finding
- **Basis** – reviewer’s evaluation of the substantiation of the finding in the source on a 0 to 4 scale. If there is no basis, it is rated a 0; poor evidence, a 1; some evidence, 2; well substantiated, 3; considered a fact, 4
- **Unit** – the government unit or region cited in the finding

It is not necessary to use EndNote® to make the most of the project completed by SPAA. Rather, the working details contained in EndNote® are there to support this report.

**Library of Documents**

Each article, or an appropriate extract from the article, report, book excerpt or other research document, has been stored and will be accessible in a separate file as a Word Document or PDF. LUARCC will be able to link to it from the EndNote® reference database that SPAA will provide as a final work product. It will contain the full text of appropriate parts of the information sources found. Hence, it will allow LUARCC or its staff to review the original information that SPAA has summarized, allowing the Commissioners to be confident about their decisions as LUARCC goes forward.

**Preparing the Final Report**

SPAA used the findings in the EndNote® annotated bibliography to organize the report for each project around the questions initially specified by LUARCC in the original RFP. In preparing the report, the faculty and project director reviewed the findings, interacted with the research associates who had found and read the articles, and, when warranted to resolve any ambiguity, read the original texts. This final review generated SPAA’s conclusions in this report. In addition to this report, SPAA will provide an overall summary report for all five projects it completed.
### APPENDIX C

**RFP QUESTIONS**

<table>
<thead>
<tr>
<th>RFP Question</th>
<th>Question ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there optimal arrangements for delivering various public services from the standpoint of efficiency and to minimize duplication of efforts? Are there diseconomies of scale associated with larger service delivery operations? The commission is focusing initially on the following services: Police, Fire, Emergency Dispatch, Public Health, Public Works, Courts, Construction Code Enforcement, and Animal Control. Examine this question from the perspective of population served, population density, service area, or other measures of service delivery jurisdiction deemed relevant and appropriate in the New Jersey municipal context.</td>
<td>SD</td>
</tr>
<tr>
<td>Evaluate and rank the effect of population density (a pattern of sprawl versus compactness)</td>
<td>SD1</td>
</tr>
<tr>
<td>Evaluate and rank the effect of physical expanse of the municipality</td>
<td>SD2</td>
</tr>
<tr>
<td>Evaluate and rank the effect of demographic characteristics of the population (wealth, poverty, age characteristics, education level, demand for services)</td>
<td>SD3</td>
</tr>
<tr>
<td>Evaluate and rank the effect of character of land use (bedroom community versus heavily commercial or industrial tax base)</td>
<td>SD4</td>
</tr>
<tr>
<td>Evaluate and rank the effect of natural features (limitations on development owing to aquifers, steep slopes, other environmental sensitivities)</td>
<td>SD5</td>
</tr>
<tr>
<td>Evaluate and rank the effect of age of community and infrastructure (older industrial cities versus newer settlements on the ex-urban fringe)</td>
<td>SD6</td>
</tr>
<tr>
<td>Evaluate and rank the effect of demands on municipal services and infrastructure (seasonal peaks, bedroom community versus employment hub)</td>
<td>SD7</td>
</tr>
<tr>
<td>Evaluate and rank the effect of stress on the property tax base (high proportion of tax exempt property, land use restrictions that inhibit ratable growth)</td>
<td>SD8</td>
</tr>
<tr>
<td>What are the optimal arrangements for delivering the abovementioned services that maximize cost efficiency or achieves other benefits?</td>
<td>SD9</td>
</tr>
<tr>
<td>Identify a range of optimal arrangements depending upon municipal characteristics such as any enumerated above</td>
<td>SD10</td>
</tr>
<tr>
<td>Any challenges encountered in attempting to define optimal service delivery arrangements and an analysis of any difficulties encountered</td>
<td>SD11</td>
</tr>
<tr>
<td>Other variables which would be helpful for commission members to understand in attempting to identify criteria for recommending merging of services/alternative service delivery arrangements to those which currently exist</td>
<td>SD12</td>
</tr>
</tbody>
</table>
APPENDIX D

BIBLIOGRAPHIC DATABASES

Academic Search Premier
Books in Print with Reviews
Business Source Premier
Catalog of U.S. Government Publications
Conference Board Research Collection
CQ Researcher
Eagleton Poll Archive
Factiva
Gartner Research
GPO Access
Historical Statistics of the United States: Millennial Edition
Human Population & Natural Resource Management
Index to Legal Periodicals Full Text
Investext Plus
Lexis/Nexis Academic
Lexis/Nexis Statistical
National Technical Information Service
New York Times
Public Affairs Information Service - International and Archive
SA ePublications Social Science & Humanities Collection
Social Sciences Full Text
Statistics Canada's E-STAT
TV-NewsSearch: The Database of the Vanderbilt Television News Archive
Value Line Research Center
Wilson OmniFile Full Text, Mega Edition
Worldwide Political Science Abstracts

Other Information Sources

Research and Information Resources for Public Administration
Using the Political Science and Government Literature
Public Performance and Measurement Review
http://spaa.newark.rutgers.edu/shareservice.html
SPAA's Public Performance and Reporting Network
Local Unit Alignment, Reorganization, and Consolidation Commission

Literature Review and Analysis Related to Measurement of Local Government Efficiency

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May 6, 2009
# Table of Contents

Literature Review and Analysis Related to Measurement of Local Government Efficiency

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Report</td>
<td>6</td>
</tr>
<tr>
<td>Review and Synthesis of the Literature</td>
<td>9</td>
</tr>
<tr>
<td>Comments on the Literature</td>
<td>23</td>
</tr>
<tr>
<td>Conclusions</td>
<td>24</td>
</tr>
<tr>
<td>Appendix A – Annotated Bibliography</td>
<td>26</td>
</tr>
<tr>
<td>Appendix B – Methodology</td>
<td>47</td>
</tr>
<tr>
<td>Appendix C – RFP Questions</td>
<td>51</td>
</tr>
<tr>
<td>Appendix D – Bibliographic Databases</td>
<td>52</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) contracted with the School of Public Affairs and Administration (SPAA) at Rutgers University, Newark campus in October of 2008 to conduct a review of the literature on measurement of local government efficiency. Although centralized performance measurement systems have been in place and continue to evolve and improve in other countries, they are absent at a state level in the United States. The New Jersey legislature has recognized the value of such a system in the enabling legislation creating LUARCC:

Local governments must be trained to use performance measures for decision making, strategic planning, performance improvement, accountability, and communication, and rewarded for increased efficiencies that result from their use.

This report provides an overview of performance measurement systems in the United States and throughout the world. Based on the components found in the systems the literature describes, a performance measurement system should include the following:

- A system of benchmarking among the local governments in the state in order to facilitate improvement and best practices.
- A system of different types of performance measures including workload, input, output, and outcome indicators.
- A system of management review that encourages management action and monitors its effectiveness.
- Reporting to the state of performance measures and management initiatives resulting from the analysis and review of the performance measures.

According to the Public Performance Measurement and Reporting Network (2009), performance measurement and reporting serves three purposes:

- Informs government policy and management practices and should lead to: performance improvement and policy development that results in better practice and alignment of governmental services to community needs.
- Provides data that enables accountability and transparency.
- Enables informed communication between citizens, government, and not-for-profit organizations to foster trust.
Although it is a complex undertaking, the most difficult decision for LUARCC and the state is not what the overall system should look like when it has matured. The most difficult decision is how to get there from the current situation. Our review of the published research suggests that the following five principles should guide the development of a measurement system:

- Measurement should occur at each stage of the service delivery process.

- Measurement should start with simple, basic forms of data analysis, eventually progressing to the powerful tool of Data Envelopment Analysis (DEA).

- The system should reflect “best practice” models for performance reviews and improvements, such as CitiStat or CompStat.

- Municipalities should benchmark their performance against comparable cities and towns, and should collect standardized data to do so.

- Performance data should be available to the public.

Overall, the literature addressed some questions in the scope of work for this report:

- There are many models and techniques for measuring efficiency.

- Basic information can now be collected, but valid benchmarking requires that municipal accounting and data collection systems be standardized.

- Stakeholders should use the data for diagnosis of efficiencies and improvement of services.

- Best practices in performance measurement are illustrated by the “Stat” cases: CitiStat, CompStat, etc.

- Non-financial benefits of performance measurement include improvements in the quality and efficacy of services.

However, some questions in the scope of work are not addressed:

- Municipal performance is more commonly compared to past performance than to the level of services in another jurisdiction.

- When the literature estimates cost savings, it does not generally make the link to tax savings. In one instance, a series of newspaper articles revealed this was a policy choice being debated by the governing body.
• Government structure is not related to measurement of efficiency.

• Other states have not mandated performance measurement by municipalities.

**Questions from the Scope of Work (RFP) on Measuring Local Government Efficiency**

Purpose of the Literature Review:
Through analysis of existing case studies, this work examines attempts to measure productivity outcomes through the application of a methodology which is credible according to the investigator. The primary purpose is to ascertain whether there are methodologies of benchmarking, performance evaluation or “best practices” for determining the most efficient delivery of municipal services within the United States.

**How was efficiency measured?**

*The commonly used "cost per capita" measure of efficiency has issues of comparability and usefulness. The literature provides a number of different indicator types used in a performance measurement system in order to provide useful data to managers and others. The body of the report contains references to other resources, which list specific indicators.*

**Is there any correlation between size of service area for the delivery of a given service and efficiency and/or effectiveness?**

*The report on Optimal Size covers this topic, and indicates that much of the literature states that relatively large and relatively small municipalities may be less efficient, but this varies with the specific service being delivered. There is some disagreement in the literature about optimal size even within a specific service type (police services are an important example).*

**What type of information was collected, and any changes that needed to be made in municipal record keeping to report the data consistently over time?**

*If users or stakeholders are to make inter-jurisdictional comparisons, then measurements must be standardized. The literature states that it is easier to measure efficiency if comparisons are only historical within the same unit, but such comparisons have limited usefulness. Measurement of outcomes requires changes in record keeping, since the focus, where performance has been measured, is typically on workload or output measures.*
How was the information utilized?

*Data was used primarily for internal management, and less frequently for public reporting and accountability.*

Was the municipality compared to others in a larger geographic study or was the municipality compared only to its own progress over time?

*The most common comparisons are to prior time periods within the same government unit, but these comparisons are not as useful as inter-jurisdictional comparisons. The report provides examples of systems in which inter-jurisdictional comparisons have been made.*

Did evaluative studies identify cost savings which resulted in property tax savings through greater attention to municipal productivity?

*The literature rarely links examples of actual cost savings to tax savings. Cost savings, not tax savings, are documented, but not that frequently and with suspicions about reliability.*

Were there secondary benefits to the measurement of productivity that were identified in the case studies other than cost savings?

*The literature promotes quality of service delivery as a major, perhaps even primary, benefit of performance measurement.*

Were benchmarks established and if so, how was the benchmark utilized?

*The literature defines benchmarks primarily as inter-jurisdictional comparisons. But the most common form of comparison is over time within the same unit of government. Benchmarks were utilized as catalysts to performance improvement. An example from the North Carolina Local Government Performance Measurement Project is the use of inter-jurisdictional comparisons on solid waste efficiency to change the process for garbage collection.*

Were changes in government structure or other government reforms effectuated as a result of productivity benchmarking?

*Changes in governmental structure are not typically a direct result of benchmarking. There are instances when the identification of inefficient service delivery leads to changes, which could include a change in structure. Performance measurement encourages changes that are usually operational in nature.*
Were best practices established and if so, how were they established and how were they used?

While there are a number of performance measurement models that could be considered as best practices, the literature did not highlight the issue of finding best practices in service delivery as a result of the measurement of performance.

Does the literature point to a model of efficiency measurement we might use in New Jersey to improve municipal service delivery performance?

There are models based on inter-jurisdictional consortiums, such as those developed by ICMA and the University of North Carolina Institute of Government. The “Stat” models are more oriented to performance management for results or outcomes. The State of New Jersey could examine these and other models to determine what would fulfill the performance measurement goals of the State.

What role did the State have, if any, in other States where serious attempts were made at measuring service delivery or was the impetus only from within the municipality itself?

There is no state-mandated model or performance measurement system. In some other countries, centralized systems have been developed and implemented by a central government to require local governments to provide the data.
PURPOSE OF THE REPORT

To meet its overall goals as expressed in the legislation signed into law on March 15, 2007, the Local Unit Alignment, Reorganization, and Consolidation Commission (LUARCC) commissioned a literature review to examine best practices among municipalities in the United States and elsewhere in measuring service delivery performance. In the RFP it issued, LUARCC elaborated that the review will examine the attempts to measure productivity outcomes and will ascertain whether there are methodologies of benchmarking, performance evaluation, or best practices for determining the most efficient delivery of municipal services within the United States. The RFP focused on the following points:

- How is efficiency measured?
- Is there any correlation between size of service area for the delivery of a given service and efficiency and/or effectiveness? (Note that the report on Optimal Municipal Size and Efficiency is devoted to this topic.)
- What type of information was collected? What changes need to be made in municipal record keeping to report the data consistently over time?
- How was the information utilized?
- Was the municipality compared to others in a larger geographic study or was the municipality compared only to its own progress over time?
- Did evaluative studies identify cost savings which resulted in property tax savings through greater attention to municipal productivity?
- Were there secondary benefits to the measurement of productivity that were identified in the case studies other than cost savings?
- Were benchmarks established and if so, how was the benchmark utilized?
- Were changes in government structure or other government reforms effectuated as a result of productivity benchmarking?
- Were best practices established and if so, how were they established and how were they used?
- Does the literature point to a model of efficiency measurement we might use in New Jersey to improve municipal service delivery performance?
- What role did the State have, if any, in other States where serious attempts were made at measuring service delivery or was the impetus only from within the municipality itself?

The annotated bibliography that is included in this report is the result of the research into the questions above. SPAA has synthesized the information in the articles that are listed in the bibliography and highlighted the conclusions presented in this report. Our role was to look for model implementations of performance measurement systems and provide evidence of what must be put in place to utilize them effectively. The enabling legislation for the establishment of LUARCC states:

Local governments must be trained to use performance measures for decision making, strategic planning, performance improvement,
accountability, and communication, and rewarded for increased efficiencies that result from their use.

The literature on performance measurement in local government is vast. “From New York City to government entities of all shapes and sizes, performance measurement continues to gain in popularity. Robert Kaplan's Balanced Scorecard, David Osborne's Reinventing Government, the success of the NYPD's COMPSTAT process, and the ever-increasing public pressure to report performance have made the practice of performance measurement commonplace in the public sector.” (Page and Malinowski, 2004)

LUARCC has asked SPAA at Rutgers to review the literature to provide insight into how to measure the efficient delivery of municipal services. Our review describes types of efficiency measures, surveys some of the techniques for analysis of the resulting data, discusses the important methods of targeting and comparing results, and highlights some of the benefits resulting from performance measurement. The final section attempts to describe a performance measurement model for New Jersey based on what exists in the literature, and, although the review highlights the best practices in the field, this discussion recognizes that getting to that level will require time and a process of educating and training local government officials and staff.

A Primer on Performance Measurement

Since this field has evolved so quickly in recent decades and can be quite complex, it is useful to introduce some terminology and an overall model of performance measurement. Over the years there have been many categorizations of performance measures and there has been accompanying disagreement about what the categories should be and what is really important. For the purposes of this review, the following types of indicators provide the framework of the discussions that follow (Julnes and Holzer, 2008; Fry, 2004):

- **Workload** – indicators of the amount of work that must be accomplished, such as the number of patients requiring treatment or the curb miles that are required to be swept.
- **Inputs** – indicators of the resources used, such as budgeted dollars or FTE’s.
- **Outputs** – the work completed, such as patients treated or curb miles swept.
- **Exogenous or explanatory variables** – factors that affect the work process but are not a part of it, such as the education level of the population served or the number of days without snow cover.
- **Outcomes** – the results of government service delivery, such as infant mortality or cleanliness of the streets.

A simple model of service delivery views the workload as the amount of work to be done, which is a variable determined by the conditions or the population served. The inputs are determined by government executives or high-level managers. Outputs are affected by these input decisions, as well as by the effectiveness of the operational management and the productivity of the employees. Outcomes are the ultimate result of
all the other indicator types, including factors over which government does not have direct control, such as workload measures and exogenous variables.

The following is a theoretical discussion. In a more sophisticated model of service delivery, the analysts realize output may be almost completely determined by workloads as long as inputs are adequate. Effective management sees it as the duty of government to address workloads, and, therefore, outputs are just a reflection of having done the job. Enlightened government may look for ways to reduce the workloads, investing additional inputs into programs targeted to reducing the need for service.

The following concrete example is from Project Scorecard (The United States Conference of Mayors, 2000), a street and sidewalk litter rating system begun in the 1970’s in New York City and now part of the Mayor’s Management Report. In a given sanitation district, the workload would be the curb miles to be swept and the frequency of sweeping that was required. The input would be the sweeper hours (which results from the general budget inputs of manpower and equipment). The output would be the curb miles swept. Exogenous variables could include the number of days with winds over ten miles per hour, the percent of commercial land use (litter creating), or the education level of the population. The outcome was the cleanliness of the streets as measured by the city or its contractor through a trained observer rating of cleanliness on samples of streets in the sanitation district.

The more sophisticated model recognizes that the real workload is the amount of litter generated on the streets, which drives the frequency of sweeping that is necessary. If the workload increases and resources are adequate to the task, the output of curb miles swept will increase, but the outcome of street cleanliness may not be affected. Enlightened government will look for ways to reduce the workload, that is, the amount of litter generated. In New York City, they used Sanitation Police to reduce the workload by writing tickets for improper containerization of garbage (reducing spillage onto the street and sidewalk), for littering, and for alternate side of the street parking (to increase the effectiveness of the sweepers). One of the results of the enlightened evaluation of the Scorecard outcome measure of street and sidewalk cleanliness was the civilianization of the Sanitation Police, which allowed more enforcement effort at less labor cost, a direct attack on workload.

The literature discusses indicator types in addition to the five presented. The basic five indicator types yield efficiency, productivity, and effectiveness measures from simple calculations. Among the many sources for examples of specific indicators is SPAA’s Public Performance Measurement and Reporting Network website (www.ppmrn.net). It is a guide to other websites and manuals. Many of these will contain lists of indicators and other information. Many of the references in the annotated bibliography list other indicators. (Braadbaart, 2007; Garcia-Sanchez, 2006; New South Wales Department of Local Government, 2008; Drake and Simper, 2000; Sun, 2002)
REVIEW AND SYNTHESIS OF THE LITERATURE

Efficiency Measures

Measurement of efficiency is not an easy task. Attempts to do so have been going on since at least the 1920’s (Ridley, 1927), but the growth in the literature over the last fifteen years (Government Accounting Standards Board, 1994; International City/County Management Association, 2008) is a testimony to the overwhelming increase in the interest in measuring performance and, it appears, to the belief it can promote improvement. The experts, who have toiled to get it right, know the difficulties, as well as the potential:

In the face of these complexities, too many local governments resort to reporting “FTEs per 1,000 population” or “cost per capita” for services overall or for the services of a particular department. These are extremely crude measures of efficiency, if they can be called efficiency measures at all. (Ammons and Rivenbark, 2008)

Outcomes are reasons governments produce. Outcomes are the crime rate, the cleanliness of streets, the economic vitality of the community. However, outcomes are not totally under the control of municipal government, or any government for that matter. Behn, who writes a monthly management report, largely on performance measurement and managing for results, states in one of his articles:

The standard measurement mantra is: “Don’t measure inputs. Don’t measure processes. Don’t measure activities. Don’t measure outputs. Only measure outcomes.” Unfortunately, in city government (indeed, in any government) this is often difficult. Sometimes it is impossible. Consequently, a CitiStat strategy may have to rely more on output data than on outcome data. (Behn, 2007)

The implication of Behn’s comments is that the use of the data determines what one needs to measure. From an internal management perspective, the use of the data is to increase allocative efficiency, that is, to reallocate resources, to modify processes, and to reconfigure budgets to get the results desired. Outcomes, such as clean streets, are more important to the public. Outputs, such as curb miles swept, are more important to managers.

The discrepancy between larger goals and measures over which managers have control is more severe when one considers workload measures. Some managers use workload as a measure of productivity, but workload only describes the amount of work to be done. A classic example is using tons of garbage collected as a measure of productivity. If the tons-of-garbage indicator declines, it does not indicate the Department of Sanitation is slacking off. Missed or late pick-ups are measures of performance. Tonnage is not productivity. In fact, if recycling is effective, the workload measure of tons will decline, which indicates improved productivity of the solid waste program as a whole.
Ammons and Rivenbark (2008) comment on the use of workload indicators:

Officials taking the narrow view of accountability are less likely to venture beyond workload measures and are unlikely to try to incorporate performance measures into key management systems. For them, it seems rational and prudent to collect only the simplest measures and to divert as few resources as possible from service delivery to the measurement of performance. Given their narrow view of accountability and the minimal value of raw workload counts for management or policy decisions, they are unlikely to use performance measures meaningfully in strategic planning or management systems, performance contracts, departmental or individual work plans, performance targets, performance audits, program evaluations, service improvement strategies, cost–benefit analyses, annexation and other special studies, or budget proposals.

Practitioners and studies have often distinguished between controllable and non-controllable inputs to explain results or outcomes. Controllable factors include management systems and capacities, while factors that are often beyond the control of a local jurisdiction may include economic, environmental and demographic factors. In his description of Project Scorecard, Mayor Giuliani states:

The cleanliness of New York City is not determined by the performance of the Department of Sanitation alone. Many factors contribute to the cleanliness of streets in neighborhoods. Weather conditions and the collective behavior of pedestrians, motorists, homeowners, tenants, landlords, building superintendents, shopkeepers, commercial establishments and private carters are all major factors affecting street and sidewalk cleanliness. Scorecard is designed to measure actual litter conditions that are the product of the millions of "sanitation transactions" that take place every day. (The United States Conference of Mayors, 2000)

Project Scorecard does not measure all of these exogenous variables, but it includes some, like weather, and that provides additional credibility to the results, when managers are held accountable for performance.

Other articles reference the use of socioeconomic or other conditions outside the control of the government unit (Ouellette and Vierstraete, 2005; Stevens, 2005; Worthington and Dollery, 2002). An alternative approach is provided by incorporating the exogenous variables in a profile of the government and categorizing the governments based on the profile before comparing them (New South Wales Department of Local Government, 2008). Accounting for these exogenous variables, in one way or another, can reduce the estimated level of inefficiency and make it more palatable for managers to focus on outcomes over which they do not have complete control.
The Balanced Scorecard approach (Eagle, 2004; Ho and Chan, 2002) is a methodology that was developed to counteract the over-reliance on bottom line, profit-focused indicators in the private sector. The Balanced Scorecard used other measures that were related to performance and were part of the production process prior to the final determination of profitability. This allowed organizations to see problems before they hit the bottom line. The concept is used in the public sector to encourage a broad view of different parts of the process of producing municipal services.

Data must be comparable, particularly if the organization intends to use cross-jurisdictional comparisons. One author blames the demise of one system on self-reported data and their inconsistencies (Coe, 1999). To ensure different organizations in a benchmarking consortium provide comparable data, some form of auditing can be helpful, including even the inexpensive device of asking the manager to certify that the data is correct (New South Wales Department of Local Government, 2008).

The North Carolina Local Government Performance Measurement Project had difficulty in its early stages because of comparability problems (Rivenbark and Carter, 2000). “The lack of generally accepted criteria to compare service costs for local government has hindered benchmarking initiatives.” Led by the Institute of Government at the University of North Carolina, the project now contains a “full cost-accounting model developed to ensure that localities employ the same methodology to collect and report cost data associated with performance measures.” The author states further that the “accuracy and comparability of performance and cost data are the fundamental ingredients of a benchmarking and performance measurement project.” The Institute engages in a rigorous data cleaning process and returns drafts to the participating units for their review. Without the centralized resource represented by the Institute of Government, the comparability of the performance measures would be suspect and the entire project would suffer.

**Analysis of the Measures**

Both reporting and service improvement can be products of performance measurement systems. “Perhaps it is axiomatic that performance measurement systems designed strictly for the former [i.e., performance reporting], especially when a premium is placed on ease of data collection, are unlikely to yield much of the latter” (Ammons and Rivenbark, 2008). This is not to say that the performance measures that municipalities are already collecting are of no use. At the present time, they are the only data available on which decisions can be made. However, looking past that short-term time-frame, the systematic collection of more meaningful data for all municipalities would drive better management decisions.

The basic steps in a performance measurement system include the following (United States Office of Personnel Management, 1974; Hatry and Wholey, 1999):

1. Begin with a simple measurement system and draft performance measures.
2. Collect the data on performance measures.
3. Analyze the data.
4. Interpret the data, using comparisons where possible.
5. Identify functions, units and procedures that are “ripe” for performance improvement.

Performance measurement is a routine and iterative process. Once the five steps are completed, the steps begin again. Since performance improvement is an on-going process, sometimes the steps do not appear so distinct. In particular, analyzing, comparing, and reviewing the data may occur simultaneously or, at the very least, in iterative phases.

The literature has recommended a number of different ways to analyze performance over the years, but one – Data Envelopment Analysis (DEA) – has become the standard, first internationally, but now with growing widespread acceptance in the United States. DEA calculates performance indicators based on multiple inputs and outputs and distinguishes between types of efficiency, such as scale, technical, and allocative efficiency (Drake and Simper, 2000; Sun, 2002; Ouellette and Vierstraete, 2005; Williams, 2005; Woodbury et al, 2003; Chalos and Cherian, 1995; Moore et al, 2005). DEA also separates out the effects of exogenous variables. Woodbury states: “… the present reliance on partial measures of performance is inadequate and should be heavily augmented by data envelopment analysis” and “the obvious analytical route seems to be an industry-wide adoption of DEA methodologies.”

According to Worthington and Dollery (2002), “The use of DEA as a technique for measuring the efficiency of government service delivery is now relatively well-established in Australia and several other advanced countries.” DEA assesses the efficiency of courts of law (Pedraja-Chaparro and Salinas-Jimenez, 1996), municipal water services (García-Sánchez, 2006), public schools (Mante and O’Brien, 2002) and municipal police services (Drake and Simper, 2002; Barros, 2007).

Indirect data can distort performance data and the estimates of efficiency resulting from them. In a study of health care, it appeared there was distortion in the estimates of inefficiency and the comparisons of hospital units because of the manipulation of this indirect data (Barretta, 2008). This study breaks the total costs into sub-categories in an analysis of the variations found in efficiency, concluding that accounting differences are masking the real rates of efficiency. It suggests removing the costs allocated from internal subunits in the hospital (indirect costs) because the hospitals manipulated them in order to increase perceived efficiency.

Dashboard analysis has also become popular. Like the automobile device of the same name, it shows indicators of performance, including an alarm status, when appropriate. Writing about the Washington State Transportation Improvement Board, the authors claim: “The Intranet-based dashboard has been the key to restoring financial stability to an agency in dire need of a new approach.” (Gorcester and Reinke, 2007) The authors
state the dashboard supports an active management approach, which has helped avoid problems by analyzing and responding to the warnings the data presents.

**Standards and Comparisons**

Comparison of performance data with targets is the key step in assessing performance. A long-standing debate about standards seems to be concluding with the notion of benchmarking. A twenty-year-old recommendation of the United Kingdom’s Audit Commission of five comparisons for local government gives a good starting point to understand the range of possibilities and the particular advantages of other comparison types (Palmer, 1993):

- Temporal — for example comparing this year's performance with last year's.
- Standards — comparing performance with some standard, which may be derived from local or national statistics or standards.
- Intra-service — comparing the performance of a number of units or sections within a department that provide the same service, for example homes for the elderly.
- Private sector — comparison with provision in the private sector, for example in legal and architectural services.
- Inter-authority — comparisons with all other authorities, all authorities of the same type, or specially selected authorities, which have similar characteristics or with neighboring authorities.

Comparisons to similar units within a department are not always possible, although they do promote competition when appropriate. Comparison of one’s own performance on a timeline has been criticized as not capable of “raising the bar,” thus not encouraging significant improvement in performance, but it does address self improvement by changing performance compared to prior achievements.

**Managerial Goal Setting**

Comparison to a standard or target determined by management is easy to implement and is not fraught with comparability issues. It requires strong management to work well. The management-derived targets can be set with an eye on past performance, or on other jurisdictions, or on where you want to be. The disadvantage is that it is inherently a management perspective and an internal one, at that, because of the lack of firm footing in anything outside the government unit. When the effective manager sets managerially determined goals, he/she encourages improvement but keeps the goals attainable, periodically evaluating the performance measure and the goals. “To be truly effective, standards should be set at a level of performance well above average, but within the bounds of what has been achieved with current best practices and technologies. That is, they should require that agencies and contractors strive for excellence without setting a goal that cannot be achieved.” (Richter, 2004)
Several major cities in the United States have developed statistics-based operational “command centers,” based on the police model. One version, CitiStat, is a popular form of managerial goal setting and performance monitoring used throughout the country. Key to a CitiStat approach is comparison, as Behn (2007) states:

> It may be the comparison of the city’s data with similar data from other similar municipalities. It may be the comparison of the data for one city unit with the data for another similar unit. It may be the comparison of the data for one city agency with some ideal—an ideal expressed in a general mayoral aspiration or in a specific performance target. Whenever the CitiStat staff reaches any conclusion about the performance of a city agency—positive or negative—they do so based on some kind of comparison.

Also critical to a CitiStat approach is the review process, with many of the governments using CitiStat actually devoting an entire room for the review. They outfit the room to create an air of managerial monitoring and use the room solely for that purpose. The literature reports the Stat models as being very successful, although they are often less analytically sophisticated than other techniques.

Behn continues about how the implementation in Baltimore progressed:

> Baltimore launched CitiStat in the summer of 2000. Two years later, Baltimore’s approach to producing results was only beginning to collect real data on results and only beginning to have an impact on its Department of Transportation’s ability to fill potholes quickly. This, however, is not surprising. After all, changing the behavior of any large organization (public, nonprofit, or for-profit) is very difficult. Nevertheless, within two years, Baltimore’s CitiStat was beginning to have the desired impact. Six years later, the impact was significantly bigger.

Queensland saw benefits in performance with CitiStat’s Operational Performance Reviews. A subsequent section of this report on the benefits of using performance measurement provides more details on the Queensland implementation.

The MIDAS system is notable in the literature (Plumridge and Wynnycky, 2007). It is noteworthy for the fact that, like CitiStat, flexibility is exercised in the nature of the comparisons. Ontario implemented the system with a top-down approach, but the users have requested enhanced abilities to be able to compare to other municipalities. The system affords year-to-year comparisons, comparisons to other municipalities for a specific set of results, and comparisons to aggregated performance statistics. Users want the ability to specify the level of comparison and the ability to choose comparable municipalities.
Inter-jurisdictional Comparisons

Benchmarking, or inter-jurisdictional comparison, is a well-accepted system. In the last twenty years, there has been an increase in the number of governments measuring performance, the number of governments measuring performance using indicators from a central source, and the number of governments mandated to use indicators as a group. All of these factors have made inter-jurisdictional comparisons easier, but they remain less common than comparisons over time. Much of the literature examines the additional benefits available through benchmarking.

The increase in the ability to do it practically is not the only reason for the rise in the popularity of benchmarking. It is an inherent desire to compare oneself with others. However, Keehley and MacBride (1997) suggest it offers something no other comparison can. “Any organization can use outcome measures to monitor its internal improvement quarterly, but new horizons can be discovered only through unconventional ideas. This factor is key to benchmarking; without it, breakthrough improvement is impossible.” This is echoed with: “By challenging the status quo, the benchmarking process provides public utility managers with a tool that can be used to provide meaningful assessments of an organization's competitive position and point the way to productivity and customer service improvements.” (Meszaros and Owen, 1997)

“Local officials would be well advised to face this fact: interjurisdictional comparisons will be made. Those comparisons can be anecdotal, pseudo-systematic (for example, "quick and dirty" studies that often sacrifice precision, consistency, and validity for simplicity and speed), or systematic. The first two types - anecdotal and pseudo-systematic comparisons - rank highest on the cringe-factor scale.” (Ammons, 1997)

Unlike managerially set targets, benchmarks are externally determined and free from the power of management. This author finds the automatic nature of the benchmark freeing: “… it serves to create a point of common reference that is based neither on opinions nor on values, but on factual measurements of productivity.” (Triantafillou, 2007)

These comparisons are still not without problems, such as those alluded to above in discussing the measures themselves. “The problems with superficial comparisons are numerous. Such comparisons often ignore differences in the nature, scope, and quality of services from place to place.” (Ammons et al, 2001) Some of the sources of the problem include the differences in the array of services included in the budget line, cost accounting rules, which costs are included in a budget line, and differences between appropriations and expenditures.

One also needs to account for exogenous factors, which the section on measurement discusses. The reason they are measured is to permit comparisons absent of the effects of these external variables, which government does not control. In addition, governments do set different goals, which specific performance indicators will reflect. The use of profiles captures differences in both environment and goals. New South Wales Department of Local Government (2008) explains how they are used:
When assessing or comparing the performances of councils, it is important to remember that local circumstances can influence how well a council provides its services. There are often good reasons why it is harder or more costly to provide certain services in some local government areas than in others or why a different mix of services may be delivered. In some cases, councils may have made conscious decisions to provide lower or higher levels of services depending on local needs. The council profiles will help you assess the comparative performance information.

In an article on the construction of performance standards, this author also emphasized the concept of standards that are within the manager’s control. “…only state and local program efforts—not characteristics of their populations or economic conditions that were beyond program managers’ control—should explain why they met, exceeded or fell below their negotiated performance standards.” (Courty et al, 2005)

The literature addresses methods for comparing performance between jurisdictions. Performance measurement systems are different from isolated performance measurement initiatives in the fact that they permit comparisons with outside entities. Benchmarking is the act of using outside comparisons. Benchmarking is a management tool to identify better practices (Raaum, 2007). These comparisons with other practices provide a real “base line for performance improvement” (McAdams and O’Neil, 2002).

With comparative data, benchmarking produces a reference that is based on factual level of productivity, rather than historical performance in a single organization. This enables managers to make more meaningful assessments of an organization’s performance, using information about its relative performance (Meszaros and Owen, 1997). Triantafillou (2007) reports that benchmarking “urges the organizational performance, which is the target of the comparison, to act.” Comparisons “help to establish a performance-based culture in the public sector” (Kouzmin et al, 1999).

Using solely internal historical assessment of performance is not as satisfactory for performance improvement purposes as external benchmarking comparisons (Boyne et al, 2002). However, in the United States, because there are few performance measurement systems, historical comparison is still the main benchmark level found in budget reporting (Willoughby, 2004; Julnes and Holzer, 2008). In a 1999 study of local governments in the U.K., researchers (Boivard and Davis, 1999) concluded, “internal benchmarking activity (sharing ideas around a single authority) appears to be relatively inefficient in many cases.” Others (Keehly and MacBride, 1997) went as far as stating that benchmarking has to go further than internal comparisons, otherwise “breakthrough improvement is impossible.”

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1 The literature uses benchmarking in two other ways in addition to the most common, comparisons against the performance of other jurisdictions. Some authors use it to refer to examining operational differences of other, high-performing organizations and incorporating those changes. It is also used, although infrequently, as any general method of comparison. This is the meaning used by Boivard and Davis in declaring internal benchmarking inefficient.
Generally, the literature states that comparisons between similar governments are best. In the empirical results from a nationwide Norwegian benchmarking study, organizational learning is demonstrated as a result of benchmarking (Askim et al, 2008). A key finding of this study conflicts with much of the literature and assumptions of practitioners. Municipalities learn more from dissimilar benchmarking partners. The study found greater learning occurred in networks in which there was greater fiscal heterogeneity among the municipalities.

Comparing performance and costs for different activities with a statewide average is not the best way to identify possible gains in efficiency. Unless professional standards, like police or EMS response time, validate an average, the average is just that (Woodbury et al, 2003) -- it tells little about how good or poor the performance is. Moreover, to identify factors public managers can manipulate to produce better results or services that municipalities might share, one should examine not the typical average case, but the high performing ones to see how they manage differently.

The Best Value approach receives support in some of the literature. A cluster of units comparing their results among themselves seems more effective than a comparison of each unit to the best practice (McAdams and O’Neil, 2002). The study identified mutually supportive programs within the cluster and good guidance material from the government as the causes for the effectiveness of the cluster.

A study of the use of Best Value Performance Plans in Wales finds disappointing results in the improvement in accountability using this approach (Boyne et al, 2002). Pre-existing conditions led to the failure to improve accountability: lack of prior performance indicators and limited staff expertise in performance measurement.

In the North Carolina Project, Winston-Salem was the top performer as a benchmarker, not because it was the best performing municipality in the delivery of services, but because it used the project information to improve its operations to the benefit of citizens. In response to the disappointing result that showed Winston-Salem was most inefficient in providing residential refuse collection service, the city took several steps to reduce its operating cost. As a result, the city was able to reduce the inefficiency factors, and expects to achieve cost savings in upcoming years. (See Figure 1) “True benchmarkers, however, realize that benchmarking is a management tool, not a beauty contest. Benchmarkers select benchmarking partners in hopes of discovering ways to improve their services, not simply as a public relations ploy. They seek out high performance organizations.” (Ammons, 2000)
Another author reviewing the results of the North Carolina Project sees benchmarking as resolving conflicting pressures on public administrators (Williams, 2005). The author perceives the pressure to perform at a high level as being in conflict with the incentives to avoid risks leading to failure and negative publicity. Leveraging performance data to improve program outcomes yields both a high level of performance and avoids risks in performance outcomes.

Factors Affecting Benchmarking

There is considerable discussion about how visible benchmarking should be. Early on, it was commonplace to espouse voluntary participation; self-directed analysis; and internal use for management purposes. These and other devices would protect the participant. Now the consensus is that benchmarking is more effective when management makes the results available to the public.

Braadbaart (2007) states publication of performance achievements promotes performance improvement, For example, media coverage and praise from various sides prompted water utilities to develop internal targets, to begin discussing performance at industry seminars, and to swap performance tips. The confidential benchmarking that was taking place between 1989 and 1995 did not even show any improvements over non-

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**Figure 1 - Source: North Carolina Local Government Performance Measurement Project. (2005). Benchmarking for Results.**
When the benchmarking became public in 1997, the economic performance of the utilities was enhanced and the performance converged.

An article in the Government Finance Review states that government officials were initially apprehensive about reporting some programs had performed below standard (Berman, 2006). Not only did nothing untoward happen to the sitting administrations, but at least one favorable newspaper editorial praised the honesty and forthrightness of the administration. The author suggests “listening” to the public about services to help align government programs to the needs and desires of the citizens who government serves. The recent literature echoes these sentiments about public communication (Gelders et al, 2008; Page and Malinowski, 2004).

Another issue about the use of benchmarking is whether the effectiveness of the tool in promoting program improvement varies along the continuum of voluntary to mandated benchmarking programs. This relates to the discussion of the publication of benchmarking data because of the force behind published materials, but it is also deserving of a separate discussion because a central government can mandate benchmarking, while keeping it as an internal management tool, without external publication.

In Norway, where the political environment is quite different from that in the United States, highly competitive comparisons offer the most improvement in management and performance (Askim et al, 2008). The opposition will use the information on poor performance to wrest power from an opposing party. The use of managed competition to improve performance is not a necessity (Braadbaart, 2007). Collaborative benchmarking can enhance both transparency and performance.

With the Best Value approach to benchmarking, compulsory and defensive modes of benchmarking result from the external accountability that is required (Bowerman et al, 2001). This reduces the focus on tangible improvement. The author’s conclusion is that management of the benchmarking by local government needs to balance the centralizing approach.

Australia found it necessary to mandate performance measurement throughout its local governments (Woodbury et al, 2003). Using the “average municipality” statistic, each state determined what specific service areas should be included for its municipalities. In Ontario, Canada, municipal governments are required to report financial and non-financial information on thirty-five measures of performance in nine core service areas (Chan, 2004).

Proof that voluntary benchmarking does not work is provided by the lack of consistent improvement in the municipalities participating in the North Carolina Project (Williams, 2005). Although there were stars, efficiency gains were not uniformly distributed across all program areas, leaving a great deal of unexplained variance. From a study of health care: “… it is not enough to make use of voluntary benchmarking models to obtain an orientation toward improvement.” (Barretta, 2008)
Successful benchmarkers plan how to use the tool and implement those plans. The less successful incorrectly assume benefits will accrue from having the tool. Hence, in the early stages of the programs for three projects the authors examined in North Carolina, they reported relatively few cost savings or program and service improvements (Ammons et al, 2001).

Best practice efforts are dependent on comprehensive benchmarking and, therefore, may require a mandated system (Bretschneider et al, 2005). The author defines best practice as preferable to any other course of action to achieve a deliberate end. It involves a comparative process, an action, and a linkage between the action and an outcome or goal. If a complete range of comparisons is not available, the notion of a best practice is not defensible, because the comparison was not made to “any other course of action.”

Benefits Derived from Performance Measurement

It may seem frustrating to some, but obvious to others that citizens may not recognize government efforts in performance measurement, benchmarking, and best practices. Furthermore, there is little evidence that service productivity enhances the satisfaction of citizens with their government (Moore et al, 2005). Although Behn (2007) illustrates the cost savings from the control and reduction in the use of overtime due to the CitiStat system in place in Baltimore, he comments: “If you walked through downtown Baltimore and asked individual citizens, “What do you think of CitiStat?” the most honest answer you would get is “Huh?” Citizens don’t pay attention to government’s management strategies. But they care about the results of those strategies.”

CitiStat is a system for improving performance of all departments in a local government, but in the initial implementation in the Police Department of New York City, it was called CompStat. CompStat has had documented benefits in a number of police departments. A recent implementation of CompStat in Queensland provided some detailed documentation of net program benefits (Mazerolle et al, 2007). Queensland documented the cost savings from reduced crime and compared the savings to the costs of over $1.5 million to conduct the OPR’s (Operational Performance Reviews) since the inception of the program. The overall savings were close to $1.2 million, after accounting for the costs of running the program. Most of these “costs” were not added costs. Rather, they were the salaries of the participants, which, prior to CompStat, paid for the other management activities they engaged in. The overall savings of $1.2 million are conservative.

The exciting thing about the Queensland study is the other benefits. Queensland attributed to the OPR’s a reduction of 3,200 crimes of the 11,700 that could have been expected without the introduction of the OPR’s, according to historical trends. This significant decrease in crimes was strongest in the reduction of unlawful entry into properties.
A group of utility providers in the Netherlands reduced costs due to benchmarking (Braadbaart, 2007). Both novice and experienced benchmarkers showed similar pricing behavior, although the novice bench markers had the advantage of operating in a mature system.

The results from the North Carolina Project showed a significant reduction in the cost per ton of refuse removal. The officials had been aware of a need to change the recycling and refuse collection systems before they had comparative data, but the hard evidence made the case clearer and provided a needed impetus for change. Data also smoothed the internal negotiations that accompanied the required operational change (Ammons, 2000).

**A Performance Measurement Model for New Jersey**

The literature review shows a range of different implementations of performance measurement. Academics generally agree that other countries have done more, and there is more sophistication abroad than in the United States. SPAA is not aware of any state that has mandated a performance measurement system, but there are many centralized governments outside of the United States, which have mandated or promoted a centralized system, usually with benchmarking comparisons inherent to it.

One of the most sophisticated and transparent systems is the British Comprehensive Performance Assessment (CPA) system, which has been in place since 2002. Under the CPA systems, British municipalities have to report on a vast number of indicators to the central government, where the data is then fully accessible to citizens. The oldest systems in place are Ontario’s Municipal Performance Measures Program (MPMP) and Nova Scotia’s Municipal Indicators, which both started in 2000. A third Canadian province, Quebec, started a province-wide municipal performance measurement system in 2003. Different states and territories in Australia and the central government in Norway have mandated municipalities to provide information on certain key service areas. However, there are not as elaborated as the systems presented above.

There are important individual and group implementations in the U.S., including New York City; Worcester, Massachusetts; Portland, Oregon; North Carolina; and Fairfax County, Virginia. More locally, Union Township is proud of its implementation of the CitiStat model.

If New Jersey moves forward to implement the systematic collection of standardized performance measures from all its local governments, it would be the first state in the union to do so. While the effort would be considerable, New Jersey could avoid pitfalls that previous performance measurement system implementations encountered: hastiness of implementation; no or little practitioner outreach in the design phase (Davis, 1998); lack of comparison subcategories (Foltin, 1999) and the absence of shared accounting practices (Coe, 1999).

Most performance measurement systems evolve from their initial implementation. Behn proposes the low hanging fruit approach for a beginning effort: “In this situation, the
mayor might well choose to focus on a few smaller but easily corrected, if not eliminated, problems. Faced with skepticism inside and outside of city government, a mayor could elect to demonstrate some quick wins that can silence the critics and convince others ....” Picking key service areas to begin with and indicators of performance in these areas where improvement is easy to attain would maximize the chance of early success and start a learning process in New Jersey municipalities.

The literature has considered The North Carolina approach to be a good model, but its results in performance improvement are mixed. The key point is that it is a voluntary model that has sought to achieve consensus as it has evolved. Specific suggestions from this project would include using steering committee meetings to discuss new areas of study, building consensus, and ensuring comparability (Rivenbark and Carter, 2000). The state could use this process to evolve a beginning system into a sophisticated system that would improve local government and provide a means to continually measure performance. However, if the incentives and disincentives present in the New Jersey legislation (New Jersey Public Laws Chapter 54, 2007) are not used effectively, it may have the same mixed results as North Carolina experienced.
COMMENTS ON THE LITERATURE

The data in the literature are thorough and comprehensive. They are a good reflection of the state of our knowledge. The academic community writes extensively on performance measurement. In addition, academics are often the consultants to or creators of systems that are implemented.

The literature has evolved in this field, because it is, as they say, “Hot.” What was written twenty years ago formed a base for the conceptualization of the field and a roadmap to the investigations that followed.

The literature on performance measurement is extensive, but culling out what is most appropriate from the volume is challenging. It is wise to consider the work recently done in other countries when considering what the final model for New Jersey should be. However, New Jersey may need to look elsewhere to find the initial steps it should take to get to a final model.

Bob Behn, who is cited in this review and writes a monthly management series with a performance measurement focus, states that what you need to measure is determined by what you are going to do with it. Determining how the information will be used is an early stage in developing a performance measurement system. Once that decision is known, specific parts of the literature become more appropriate and the designers can formulate a specific model.

No state has centralized a performance measurement system. Countries and sub-units of countries have done so, but the literature only covers what is required to be measured and reported. It is silent on how to manage using such a system.
CONCLUSIONS

Performance measurement, and the general attempt to measure efficiency of local government, is an increasingly important concern. Both internationally and with increasing frequency in the United States, local governments are implementing performance measurement systems to improve efficiency and outcomes. Overall, the literature points to promising tools or approaches:

- **Performance Indicators (Measures)**

  Performance measures should cover the range of the processes being monitored, from workload and inputs to outputs and outcomes, with a consideration for external variables, which may affect performance potential. Outcomes are most important because they measure those conditions that are concerns of the public and help managers, who accept their responsibilities for outcomes, to think outside the box. One also needs to focus on inputs, internal capacities, and outputs. The literature contains many good measures.

- **Data Envelopment Analysis**

  Analyzing performance data has advanced in recent years. The most powerful tool appears to be Data Envelopment Analysis, which accounts for multiple inputs and outputs and distinguishes between technical, scale, and allocative efficiency. DEA requires sophisticated analytic expertise to use appropriately. However, good management can occur with simple, even basic, forms of data analysis, if it is informed by an understanding of the processes being monitored.

- **CitiStat**

  CitiStat is an example of a successful data review and performance management system, but only one municipality in New Jersey has implemented it. Since it relies more heavily on management review than on sophisticated analysis or benchmarking, it is hard to replicate throughout an entire state. CitiStat does not preclude sophisticated analysis, but it does not rely on it to achieve its internal management goals.

- **Benchmarking (Inter-jurisdictional Comparisons)**

  Local governments should make comparisons in order to maximize improvement in the delivery of services. Benchmarking against the performance of other governments is often a popular choice, but there are difficulties in creating comparable cost-based data. When data is available, stakeholders and managers will benchmark.
• Transparency of Performance Data

Managers and local officials debate whether they should publicize all performance data, but the literature considers the benefits of transparency and critical analysis as overshadowing the concerns of those who fear public reaction.
APPENDIX A -- ANNOTATED BIBLIOGRAPHY

Literature Review and Analysis Related to Measurement of Local Government Efficiency


The article elaborates on the belief that citizens care about government services and discusses how performance measurement can help provide appropriate information to citizens. Efficiency measurement as opposed to resource input measurement can benefit local governments. The potential uses and benefits of efficiency measurement are discussed. The article emphasizes the use of inter-jurisdictional comparisons.


The article defines benchmarking. Benchmarking takes 3 distinct forms in the public sector, each serving a different purpose. The first form is corporate benchmarking, which is tied to best practice processes. The second form uses targets as goals. The article investigates the third form of statistical comparisons and concludes that when applied properly and with care, benchmarking is a performance improvement technique that can yield tangible results, as demonstrated by the North Carolina cities of Greensboro, Wilmington, and Winston-Salem.


This article examines three prominent projects designed to measure and compare the performance of local governments. All three projects are assessed from the perspective of the local government participants in these projects, revealing gaps between high expectations and subsequent results, but nevertheless suggesting an array of benefits for participants.


Many local governments measure and report their performance, but the record of these governments in actually using performance measures to improve services is more modest. The authors of this study examine patterns of performance measurement use among a set of North Carolina cities and conclude that the types of measures on which officials rely, the willingness of officials to embrace comparison, and the degree to which measures are incorporated into key management systems.
distinguish cities that are more likely to use performance measures for service improvement from those less likely to do so.


Benchmarking rests on the assumption that it supports organizational learning and innovation, but the empirical knowledge that underpins this perceived means-end relationship is limited. This article draws on existing research to develop a framework for analyzing organizational learning outcomes from municipal benchmarking. The framework incorporates explanatory factors at different levels (network and municipality), and with different time perspectives (past and present). The study uses empirical results from a nationwide Norwegian benchmarking project.


This study aims to evaluate the effects produced by a strategy aimed at neutralizing one of the “disturbance factors” that may impede the focus on “real (in)efficiency” in relative efficiency assessments within the health-care sector: the exclusion of indirect costs from these comparative analyses. The empirical analysis is based on the statistical elaboration of data from a sample group of hospital sub-units within Italian health care trusts.


This paper analyses the efficiency of the Lisbon police force precincts with a 2-stage data envelopment analysis (DEA). In the first stage, the study estimates the DEA efficiency scores and compares the precincts with each other. The aim of this procedure is to seek out those best practices that will lead to the improved performance of all of the precincts. The author ranks the precincts according to their efficiency for the period 2000-2002. In the second stage, he estimates a Tobit model in which the efficiency scores are regressed on socio-economic issues, identifying social causes which vary across the city and that affect deterrence policy. The study considers economic implications of the work.


Part of Bob Behn’s monthly public management series, this edition discusses performance targets. The author takes the position that
managerial target setting is not only important, but is a responsibility of elected officials. This position is different than, but not totally incompatible with benchmark targets based on inter-jurisdictional comparisons.


This report summarizes and presents the questions most frequently posed to CitiStat staff and to Mayor Martin O’Malley by visiting mayors who want to investigate the success of CitiStat. When CitiStat is viewed as a leadership strategy rather than a management system, Dr. Behn argues, the program can be replicated and customized to each mayor’s individual needs and priorities. A key insight from this report is that there is no single, right approach as to how to develop a successful management performance and accountability structure. Success depends heavily on clear goals, committed leadership, and persistent follow-up.


The purpose of this article is to convey to readers the importance of listening to and understanding how the public judges governmental performance so that you can develop, review, produce, and report performance measures. Failing to involve the public in performance measurement and reporting can lead to dissonance between the government and its constituents, and result in misalignment of government programs.


This article outlines the main conclusions of a research project into how United Kingdom local authorities are managing within limited resources (MLR). Frameworks are developed to aid authorities to plan their approaches to MLR and to situate what they have already done and what they plan to do within a wider portfolio of tactics and strategies. An evaluation is made of how well local government is learning its way through to getting "more from less" and of what local authority support agencies need to do to help authorities to accelerate their learning. Finally, the authors argue that existing learning systems like benchmarking and quality management, while developing rapidly in local government, need further significant refinement if the costs and benefits of resource management strategies are to be systematically evaluated.
This paper examines benchmarking as a tool of the modernization process in local government. The contradictory tensions in the Best Value scheme are explored. Benchmarking is shown to encapsulate the dichotomous nature of a modernizing philosophy which espouses innovation and local solutions alongside the government's centralizing tendencies. One consequence is the advancement of 'compulsory' and 'defensive' modes of benchmarking with local authorities benchmarking for external accountability reasons; issues of tangible improvement are secondary concerns. These tensions are viewed as irreconcilable, the implication is that local government will need to carefully manage and evaluate its benchmarking activities.

The current UK government emphasizes the importance of mechanisms of accountability that involve the planning and public reporting of performance. One example of this is the Best Value performance plan. However, there has been little evaluation of the quality of the information provided in this type of document. This paper draws on literature on stake holding and user needs to identify the data required for accountability. It then assesses whether the plans produced by Best Value pilot authorities in Wales provide appropriate information. The analysis shows that very few of the plans contained the relevant material. Interviews in the pilot authorities highlighted two key reasons for the poor level of data: a lack of performance indicators prior to Best Value and limited staff expertise in performance measurement. The evidence suggests that documents such as performance plans currently make little contribution to the accountability of public organizations.

New public management (NPM) arguments on strategy and structure suggest that performance is enhanced if large organizations are disaggregated into smaller units. The NPM perspective reflects the views of public choice theorists who claim that big organizations are unresponsive to public needs, inefficient and fail to achieve their formal goals. These arguments have underpinned many recent changes in the structure of public services at both central and local levels. This paper uses data on six local government services to test the NPM hypothesis that there is a negative relationship between scale and performance. Five dimensions of performance are analyzed: service coverage, quality, speed
of provision, efficiency, and administrative effectiveness. Scale is measured through indicators of service output, caseload and needs. The impact of scale is tested in multivariate statistical models which control for other potential influences on variations in performance across local authorities.


To deal with financial constraints and increasing demand on accountability, government administrators have begun implementing modern management tools in their organizations. The balanced scorecard, a performance and strategic management system, has been adopted in for-profit organizations with success and its application in the government sector is explored in this study. Results of a survey of municipal governments in the USA and Canada show that there is limited use of the balanced scorecard. Most municipal governments, however, have developed measures to assess their organizations’ financial, customer satisfaction, operating efficiency, innovation and change, and employee performance.


Private governments, found in planned developments and condominiums, are increasingly common methods of delivering local services to residents. This paper provides the first empirical study of their impact on local public finance. A novel data set of homeowners’ associations allows construction of a panel of private governments in California. Panel methods test whether public expenditures respond to private government prevalence. The study employs a very large data set, 110 cities with 38-year time series, yielding reasonably convincing results.


This article is a case study set in U.K. regarding shared services and partnerships when three local U.K. councils came together to reduce cost and share services. Taxes and revenue sharing are discussed as well as the intricacies of U.K. partnerships. Different stages of the partnering are discussed as well as the success factors and lessons learned.


Benchmarking and performance measurement are increasingly "hot" subjects among public administrators. Among research based efforts encouraged by the performance measurement drive are two projects that attempt to develop uniform measures so that managers can compare the performance of different city and county governments. This article compares the methodology used in the ICMA and IOG projects. It begins with a brief overview of each benchmarking effort and then looks at the often unexpected obstacles the projects encountered and how they attempted to surmount them. It concludes with some broader lessons that these experiences suggest for local government benchmarking.

A fundamental challenge in the design of performance measurement and incentive systems is the establishment of appropriate benchmark levels of performance, also known as performance standards. Drawing from the information economics, contract theory and public administration literatures, the authors derive theoretical implications for the construction of performance standards. They then assess alternative methods that are commonly used to construct performance standards and consider their application in performance measurement systems in public programs. The authors draw out important lessons for the establishment of performance benchmarks and other implications for performance standards system design in public organizations.


A large number of benchmarking initiatives have now been established in UK local government and, in most cases, these activities have grown organically from a variety of local pilot schemes and from the social interaction fostered through professional networks, to the point where some classification and clarification is possible. This growth has been powered by a small number of key stimuli. The "Inter Authorities Group" (IAG), the largest voluntary benchmarking club in local government, emerged from the concern over consistent costing data. This article evaluates the current status of benchmarking in UK local government.


This article utilizes data envelopment analysis (DEA) to estimate the productivity of the English and Welsh police forces and to determine whether there are categorical scale effects in policing using multiple discriminant analysis (MDA). The article demonstrates that by using DEA efficiency results it is possible to make inferences about the optimal size and structure of the English and Welsh police forces.


This study uses both parametric and nonparametric techniques to analyze scale economies and relative efficiency levels in policing in England and Wales. Both techniques suggest the presence of significant scale effects.
in policing and considerable divergence in relative efficiency levels across police forces.

This article discusses the evolution of strategy development and performance measurement in the City of Charlotte, with an emphasis on the lessons learned from nearly 10 years of using the Balanced Scorecard model. Developed for the private sector in an effort to balance measures of organizational performance between financial results and other critical success factors, the Balanced Scorecard has been adapted for the public sector by a number of local governments. From implementing and using the Balanced Scorecard to the most recent challenge of linking strategy to resource allocation, Charlotte’s story is one characterized by continuous improvement.

State and local governments must do more with less. This has been the task for nearly three decades. Resources have decreased due to slowed population growth, recessions in the 1970s and 1980s, reduced federal funding and reluctance of citizens to pass new taxes. Furthermore, unfunded mandates, inflation, worn out infrastructure and increasing wage and benefit costs have caused expenditures to skyrocket. In light of these conditions this paper encourages the use of performance measurement and provides help in understanding the basic concepts.

The PowerPoint presentation was sponsored by the New Jersey League of Municipalities and the New Jersey Municipal Managers Association. The presentation was oriented to an audience of practitioners in municipal government who had limited experience with performance measurement. It defines performance measurement, provides the basic steps to do it, describes the benefits, lists the types of indicators, provides sources of indicators, elaborates on types of targets, and discusses what should be done to achieve results.

In this study, the authors established a procedure for evaluating the efficiency of providing the water supply. This procedure has allowed the authors to find that the proposed indicators have a discriminating capability in the analysis of the service, and to reject criticisms traditionally assigned to the sensitivity of the data envelopment analysis (DEA)
technique in relation to degrees of freedom. The article studies efficiency but is also illustrative of the use of the technique of Data Envelopment Analysis.


Performance measurement and communicating about it with the broader public is not self-evident if one looks at public services organizations. In Belgium and the Netherlands, one organization that has been under constant surveillance from its stakeholders is the railroad company. Originally a national public service, it has changed through a European directive to operate in a liberalized transportation market. In this paper, the authors present the results of a qualitative study into what the Belgian and Dutch railway companies measure about their performance towards travelers, how they measure it, and specifically how they communicate it to their employees and stakeholders. Although we might expect the Dutch railway company (NS) to be more transparent than the Belgian railway company (NMBS/SNCB), in reality the two organizations do not differ that much from each other.


Successful performance management demands effective performance reporting. Software dashboards, in particular, offer elegant simplicity to the otherwise difficult task of reporting performance for quick interpretation by both the numbers people and the ideas people. The Washington State Transportation Improvement Board (TIB) implemented its performance dashboard in 2003 and followed the government management, accountability and performance directive (GMAP) in earnest after its adoption in 2004 by the State of Washington.


In 1994, after extensive research on SEA, the GASB issued Concepts Statement No. 2, Service Efforts and Accomplishments Reporting. That Statement provided the opportunity to elaborate on accountability in government and the importance of reporting SEA performance information as part of general purpose external financial reporting (GPEFR). The Board stated that SEA performance information is necessary for assessing accountability and in making informed decisions: “Therefore, to be more complete, general purpose external financial reporting needs to include service efforts and accomplishments information.” This report is not included in the LUARCC articles folder, although it may be purchased from GASB. GASB has continued from this point, particularly
emphasizing citizen involvement in determining what should be measured and reported upon. In 2008, the Board issued an Exposure Draft of an amendment of Concepts Statement No. 2.

Hatry, H., and Joseph J. Wholey (1999). Performance Measurement: Getting Results, Urban Institute Press. Long before "reinventing government" came into vogue, the Urban Institute pioneered methods for government and human services agencies to measure the performance of their programs. This book synthesizes more than two decades of Harry Hatry's pioneering work on performance measurement into a comprehensive guide. The author explains every component of the process, from identifying the program's mission, objectives, customers, and trackable outcomes to finding the best indicators for each outcome, the sources of data, and how to collect them. He covers the selection of indicator breakouts and benchmarks for comparisons to actual values and suggests a number of uses for performance information. Joseph Wholey contributes a chapter on maintaining the quality of the performance measurement process. It is not available in the Articles Folder for the LUARCC project.


Since the Government Accounting Standards Board released Concepts Statement No. 2, Service Efforts and Accomplishments (SEA) Reporting in 1994, about one-third of local governments participate in SEA reporting, according to a recent survey. Government administrators have applied some modern, private sector management tools to solve their management problems. However, the Balanced Scorecard, a performance management system used by about 50 percent of Fortune 1000 companies, according to a recent survey by Bain & Co., has not been well received by local governments. As a follow-up to previous studies, including one by Ho and Kidwell that showed the Balanced Scorecard to be the least prevalent tool, this article examines the current performance measurement systems of municipal governments, assesses their perceived value and quality, and compares the experience of a Balanced Scorecard implementer with that of other local municipalities. This article is not available in the articles folder for the LUARCC project but is available for purchase from the AGA.


This book was written by the staff of the Center for Performance Measurement at ICMA (International City/County Management Association). The book reports how performance measurement promotes
positive change using over 70 case studies in fifteen different services areas, all from local government. The Center for Performance Measurements runs the comparative performance measurement data collection effort that is now over fifteen years old and has many local governments throughout the United States as its consortium members. The book is not in the articles folder for the LUARCC project, but is available for purchase from ICMA.

Julnes, P. d. L., and Marc Holzer, Ed. (2008). Performance Measurement: Building Theory, Improving Practice, M.E. Sharpe, Inc. This volume in the ASPA Classics series compiles the most influential contributions to the theory and practice of performance measurement that have been published in various journals affiliated with the American Society for Public Administration. The book includes major sections of original text along with the readings, and provides students and practitioners with a handy reference source for theory development and practice improvement in performance measurement. The coverage is broad, including methods and techniques for developing effective performance measurement systems, building performance-based management systems, and sustaining performance-based budgeting. The articles are all classics in the field that have endured the test of time and are considered "must reads" on performance measurement. This book is not available in the Articles Folder for the LUARCC project.

Keehley, P., and Sue A. MacBride (1997). "Can Benchmarking for Best Practices work for Government?" Quality Progress 30(3): 75-80. This article makes the case for benchmarking in the public sector. The improvements in quality and efficiency obtained by private industry through best practices and benchmarking have been so profound and widespread that public sector agencies - organizations traditionally perceived as slow to plan and implement change - are waking up to the benefits of this powerful analytical tool. The article reviews the New York City Transit Authority's adoption of best practices. It also provides ten iterative steps to take in order to benchmark.

Kouzmin, A., Elke Loffler, Helmut Klages, and Nada Korac-Kakabadse (1999). "Benchmarking and Performance Measurement in Public Sectors Towards Learning for Agency Effectiveness." International Journal of Public Sector Management 12(2). There are some encouraging examples of benchmarking within the public sector. This paper critically analyzes these examples in order to establish the vulnerability points of such measurement instruments. Additional research is in order to establish the specific learning dimensions of benchmarking and to illustrate the importance of such benchmarking and learning within the highly risky, information technology (IT)-driven experiences of systems development and failure. The paper also
compares the public sector motivation for benchmarking to that in the private sector, where it is better established, to provide insight into differences that may be important in public sector use of benchmarking.


This paper provides a review and an illustration of the Data Envelopment Analysis (DEA) methodology for measuring the relative efficiency of public sector organizations performing similar tasks. The paper focuses on measuring the relative technical efficiency of State secondary schools in a geographical region in the Australian State of Victoria. It recognizes that state secondary schools, like other non-profit making organizations, produce multiple outcomes by combining alternative discretionary and non-discretionary inputs.


The purpose of this paper is to evaluate the impact of Queensland (Australia) Police Service’s version of COMPSTAT, known as “Operational Performance Reviews” (OPRs), on reported crime. The paper employed interrupted time series analytic techniques to examine the impact of OPRs on various categories of reported crime in Queensland. The analyses assessed the extent to which OPRs were associated with crime reductions across the 29 police districts in Queensland. This study was the first to provide a systematic examination of the impact of OPRs on a relatively large number of offence categories.


The Best Value initiative has been designated as the key framework for improving service quality and effectiveness in UK local government. In support of the framework a number of measures have been introduced to measure effectiveness. However, there are problems with using comparative performance measures within the diverse grouping of local government services. This article measures the effectiveness of Best Value in a similar group of building control services by using a clustered benchmarking approach. The mainly qualitative research involves applying a strategic benchmarking approach to the 26 units or councils within the cluster and then comparing the cluster with the best practice UK measures for building control services. To facilitate the process a benchmarking measurement framework for building control was developed.
This article examines the use of competitive benchmarking as a means of assessing and responding to the changing market conditions sweeping the municipal water and wastewater utility industry. The authors present an overview of the benchmarking process, and illustrate the use of benchmarking through an examination of the techniques used to develop a competitive assessment of the Utility Division of the city of Fort Wayne. The authors perceive that rising public expectations for higher-quality, more cost-effective services are radically altering the way municipalities deliver utility services. In increasing numbers, many local governments are introducing competition, through private sector contract operation companies, into their water and wastewater utilities. Once foreign to public utility managers, the concepts, behavior, and work practices of a competitive market increasingly are becoming a reality for many municipal water and wastewater utility providers.

The authors discuss Data envelopment analysis (DEA) as a response to their view that the literature describing the performance of municipal services often uses imperfect or partial measures of efficiency. DEA has emerged as an effective tool for measuring the relative efficiency of public service provision. This article uses DEA to measure the relative efficiency of 11 municipal services in 46 of the largest cities in the United States over a period of 6 years. In addition, this information is used to explore efficiency differences between cities and services and provide input into a statistical analysis to explore factors that may explain differences in efficiency between cities. Finally, the authors discuss municipal governments' use of performance measures and problems with collecting municipal data for benchmarking.

Local governments are responsible for financing and providing an array of public services ranging from police, fire, and emergency medical services to streets, parks, and water. Two mechanisms, namely civic structure and interlocal collaboration, have the potential to solve the problem of providing high quality public services in the face of declining resources and increasing needs. The authors find that civic structure - citizen engagement in solving public problems - is positively and strongly associated with perceived quality of small town public services. Although many rural towns show significant positive association with citizen ratings
of overall service quality, citizens seem to prefer their local government directly providing police services rather than entering into interlocal agreements. This suggests that many services are better provided directly.


New South Wales Department of Local Government (2008). Comparative Information on NSW Local Government Councils 2005/2006. Sydney, NSW, Australia, New South Wales Department of Local Government: 245p. This publication of the New South Wales (Australia) Department of Local Government provides detailed performance information for three years for every municipality in New South Wales. This publication uses municipal profiles to group councils into similar groups for comparison. It represents an example of public benchmarking.

Ouellette, P., and Valérie Vierstraete (2005). "An Evaluation of the Efficiency of Québec's School Boards Using the Data Envelopment Analysis Method." Applied Economics 37(14): 1643-1653. In this paper the efficiency of Quebec's school boards during a period of severe cutbacks in their finance is examined using Data Envelopment Analysis. The average efficiency is found to be relatively high. In spite of this, potential savings could be achieved if school boards were fully efficient. Results depended heavily on school boards' socio-economic conditions. They were subjected to Tobit analysis and the boards' corrected efficiencies recalculated. The inefficiencies cost $800 million of which $200 million came from unfavorable socio-economic conditions.

metropolitan consolidation and police consolidation specifically. This article reviews the major assertions which the "anti-consolidationists" make in specific reference to the consolidation of urban police departments: (1) that larger police departments are not more efficient or economical; and (2) that citizen satisfaction with urban police services varies inversely with the size of the municipality. On the first assertion the authors find that evidence is still inconclusive regarding the economy and efficiency of larger police departments. On the second assertion, the results indicate that, contrary to the anti-consolidationist viewpoint, citizen satisfaction with police services is more a reflection of the differentiated socio-economic characteristics of central cities and suburban cities than a function of city size.


Performance measurement continues to gain in popularity in all levels and types of governmental organizations. Robert Kaplan's Balanced Scorecard, David Osborne's Reinventing Government, the success of the NYPD's COMPSTAT process, and the ever-increasing public pressure to report performance have made the practice of performance measurement commonplace in the public sector. While most of these efforts are well intentioned, too many performance measurement programs fail to live up to expectations or get derailed altogether because of poor execution. To help governments make the most of their performance measurement efforts, the authors compiled a "top 10 list" of performance measurement do's and don'ts, using case studies to illustrate their assertions.


Emphasis on improving performance in the public sector has led to the development of systems for measuring performance in local government. This article reports on the author's research into this development, presenting information on how local authorities measure performance; which dimensions of performance they attempt to measure; and how they use performance measurement information. Existing systems of measuring performance are evaluated in relation to an ideal system. The conclusion is that, although few authorities currently have a coherent system for measuring performance, pressure for continued development of such systems should yield improvements.


The objective of the article is to provide a measure of technical efficiency of the Administrative Litigation Division of the Spanish High Courts. The concept of efficiency to be measured and the most adequate technique for carrying out the efficiency analysis are selected by considering the specific
characteristics of public production. The analysis is undertaken by using data envelopment analysis (DEA) and various homogeneity tests (returns to scale and restrictions on weights) are applied in order to ensure a correct comparison between Courts.


As a response to the growing desire to access more financial and performance measurement information, the Association of Municipalities of Ontario (AMO) and the Ministry of Municipal Affairs and Housing (MMAH), with funding assistance from the Ministry of Finance's (MOF) "Strengthening Our Partnerships" program, jointly developed the Municipal Information and Data Analysis System (MIDAS). MIDAS is a powerful web-based query and analysis tool that will allow any municipal staff member to access the data compiled in the Province of Ontario's Financial Information Return (FIR) system, including the Municipal Performance Measurement Program (MPMP) data. Staff members and elected officials can query and report on this statistical, financial and operational data, examine their own historical records, and browse and make comparisons with their peer municipalities using standard and established performance measures and indicators. This increased access to financial and performance measurement data allows for an improved ability to make service delivery decisions.


This website serves as a resource for the Rutgers University School of Public Affairs and Administration's network of over 2,000 academics and practitioners. It is available to the public and contains information and other information resources on the field of performance measurement and related topics. The goal of the Public Performance Measurement and Reporting Network is to promote the use of valid, reliable data as a key element in improving the delivery of public services. In support of the Network, the National Center for Public Performance has implemented a series of initiatives: a comprehensive and continuously updated database of publications and cases; national conferences and workshops; publications of measurement-based books and articles; an Online Public Performance Measurement Certificate; and a monthly e-newsletter.


The “finding paradigm,” a four-element measurement tool used to analyze government service provision, is at the foundation of one method of
performance auditing. The four-element finding paradigm of criteria, condition, effect and cause is widely used by auditors and cited in auditing standards, and has proven a powerful tool for analyzing the performance of all manner of government, as well as private and nonprofit operations and programs. This article provides guidance and details for applying the finding paradigm to findings for audits of output and outcome performance.

This paper investigates whether the production efficiency of Norwegian local governments exhibits a spatial pattern that is compatible with the hypothesis of yardstick competition. In order to check whether yardstick competition is really responsible for the observed spatial pattern and rule out alternative theoretical explanations, the paper exploits unique information from a survey on local politicians’ attitudes towards comparative evaluation of local bureaus’ performances against other jurisdictions’ (benchmarking).

This article makes the case for performance standards, expressed from a user perspective, as opposed to specifications in the construction of highways. The author suggested customer focused issues include street smoothness, road noise, longevity of the road, and traffic congestion. The article reviews the use of performance standards in practice throughout the United States.

This seminal work in the field of performance measurement is referenced for the LUARCC projects to provide a sense of the long history of attempting to measure the efficiency of government. The book is not provided in the Article Folder for the LUARCC project and is out of print but the concepts are the basis of much of what is being implemented and studied today.

Benchmarking is a management tool that promotes process improvement. By comparing services units across jurisdictions, best practices can be identified and used to enhance less efficient and effective operations. However, the lack of generally accepted criteria to compare service costs for local government has hindered benchmarking initiatives. One of the
key components of the North Carolina Local Government Performance Measurement Project is the full-cost accounting model developed to ensure that localities employ the same methodology to collect and report cost data associated with performance measures. This article presents an overview of the development and implementation issues associated with that model and highlights the areas of direct costs, indirect costs, and capital costs. It is argued that accuracy and comparability of performance and cost data are the fundamental ingredients of a benchmarking and performance measurement project.


Since the 1993 Government Performance and Results Act, performance measurement systems based on short-term program outcomes have been increasingly used to assess the effectiveness of federal programs. This paper examines the association between program performance measures and long-term program impacts, using nine-year follow-up data from a recent large scale, national experimental evaluation of Job Corps, the nation’s largest federal job training program for disadvantaged youths. Job Corps is an important test case because it uses a comprehensive performance system that is widely emulated. Randomized experimental design was employed. That is, the assessment of program impacts is compared between those who received services and those who did not. This article focuses on a federal agency.


This article considers the measurement of performance in the public sector in general, focusing on local government and the provision of library services by English local authorities in particular. The author considers two methodologies that assess the performance of local authorities in terms of the efficiency with which they provide services, and considers methods that allow for the identification of exogenous influences on performance such as the socio-economic profile of the population served by the authority. The author finds that although both methods' results appear similar, the implications for potential cost savings vary widely. Omitting to account for background factors leads to an overstatement of the level of inefficiency and hence the scope for reducing expenditure.


Data envelopment analysis (DEA) is used to measure the relative efficiency of the 14 police precincts in Taipei city, Taiwan. The results indicate how DEA may be used to evaluate these police precincts from commonly available police statistical data for the years 1994–1996. To
sharpen the efficiency estimates, the study uses window analysis, slack variable analysis, and output-oriented DEA models with both constant and variable returns to scale. The problem of the presence of non-discretionary input variables is explicitly treated in the models used. Potential improvements in technical efficiency of police precincts are examined by readjusting the particular output/input indicators. The analysis indicates that differences in operating environments, such as resident population and location factors, do not have a significant influence upon the efficiency of police precincts.


How can we critically address benchmarking? By conceptualizing benchmarking as a normalizing governing technology, a space is cleared for analyzing some of the power relations brought into play in benchmarking activities. As a device of power, benchmarking depends upon the production of normalizing knowledge and the freedom or self-governing capacities of those who are benchmarked. The fruitfulness of this conception is illustrated through an example from the Danish hospital system.


This web page from the site of the United States Conference of Mayors was prepared when Mayor Rudolph Giuliani was in office. It presents the origins and purpose of Project Scorecard, a street and sidewalk litter rating system that was one of the first attempts in New York City to measure the results of the city's service delivery. The description provides information about how the measurement is accomplished and provides a table of street and sidewalk cleanliness results in the City's five boroughs in 1976 and 1998.


This report was originally written by Edward Koenig of the Office of Productivity Programs, but the Office of Intergovernmental Personnel Programs revised it for use by state and local governments. It attempts to get managers to look at their organization and its mission, collect and analyze information, make systemic changes, and continue to evaluate and monitor. It incorporates measurement and analysis of inputs, outputs, and efficiency in its methods for increasing productivity. This is an early report in the field of performance measurement, but it lays out the basics.

This thesis looks at the attempts at municipal benchmarking in order to discover what benchmarking tactics lead to efficiency improvements. The failed Innovation Group project and the North Carolina benchmarking project are both examined. The study examines the differing ability of municipalities to improve from the information provided from benchmarking and makes conclusions about the effectiveness of voluntary benchmarking.


This research presents data from a survey conducted as a component of the multiyear effort by the Governmental Accounting Standards Board (GASB) regarding the Service Efforts and Accomplishments (SEA) research. (p.26) In addition to the case research, the multiyear effort involved a follow-up mail survey conducted in the summer of 2000 to state and local government budget officers and specific agency and department heads and program administrators. This research assesses state personnel perceptions of performance measurement use and effectiveness for both management and budgeting decisions.


Attempts to enhance the efficiency and effectiveness of local government have lagged behind the higher tiers of governance in Australia, and it is only in the comparatively recent past that systematic efforts have been made to measure the performance of Australian local government. This paper reviews municipal efficiency measurement in Australia to advance the argument that the present reliance on partial measures of performance is inadequate and should be heavily augmented by data envelopment analysis (DEA). The authors summarize progress made in efficiency measurement on a state-by-state basis and then examine performance measurement in water and wastewater as a more detailed case study. On the basis of this evidence, the authors argue that DEA provides the best means of providing public policymakers with the necessary information on municipal performance.


A sample of one hundred and sixty-eight New South Wales local government libraries is used to analyze the efficiency measures derived
from the non-parametric technique of data envelopment analysis. Depending upon the assumptions employed, 9.5 per cent of local governments were judged to be overall technically efficient in the provision of library services, 47.6 per cent as pure technically efficient, and 10.1 per cent as scale efficient. The study also analyses the posited linkages between comparative performance indicators, productive performance and non-discretionary environmental factors under these different model formulations.


Using the planning and regulatory function of 173 NSW local governments, several approaches for incorporating contextual or non-discretionary inputs in data envelopment analysis (DEA) are compared. Non-discretionary inputs (or factors beyond managerial control) in this context include the population growth rate and distribution, the level of development and non-residential building activity, and the proportion of the population from a non-English speaking background. The approaches selected to incorporate these variables include discretionary inputs only, non-discretionary and discretionary inputs treated alike and differently, categorical inputs, 'adjusted' DEA, and 'endogenous' DEA. The results indicate that the efficiency scores of the five approaches that incorporated non-discretionary factors were significantly positively correlated. However, it was also established that the distributions of the efficiency scores and the number of councils assessed as perfectly technically efficient in the six approaches also varied significantly across the sample.
APPENDIX B
METHODOLOGY

SPPA employed a methodology for the literature reviews that consisted of thorough searches in all of the major databases representing social and policy journals. In consultations with SPAA faculty, the research associates used the knowledge from the early stages of the research to refine and expand the search, as was appropriate. SPAA created or used the following tools to assure we accomplished the aims of the Commission:

- LUARCC questions from the RFP
- Bibliographic databases
- Search terms specific to each report
- Reference database
- Annotated bibliographies
- Articles/web resources

In the first phase of the basic strategy, SPAA devised appropriate search terms and used them to search all the relevant bibliographic databases. Promising articles were recorded as citations in the reference database (EndNote®) and the full-text article content was saved to the article file (as a PDF).

In the second phase of the search, research associates assigned to the project thoroughly examined the articles for findings that addressed LUARCC’s questions. The research associates recorded each finding in the reference database, attaching it to the question it addressed and evaluating the degree to which the article or information resource substantiated the finding. The research associates completed this substantiation, weeding out articles based solely on ideology and rating the remaining articles according to the amount of evidence or the concreteness of the argument presented. During this process, team members reported any new search terms or resources they encountered to the project librarian and project director. Subsequent searches utilized this additional information.

The supervising faculty member assigned to this project and the project director reviewed the results of the first phase of the search, which found the potential articles. When necessary, they redirected the search to clarify information or find new sources. In addition, the faculty members and project director reviewed each finding for relevance to the LUARCC questions.

SPAA sought LUARCC’s input through the review of an outline of the proposed methodology to ensure that the literature search was comprehensive and focused on the questions LUARCC raised. Because of the iterative process used in the information review, the early results of our search enhanced the project tools further.
LUARCC Questions

SPAA extracted the questions from the LUARCC RFP into a spreadsheet and distributed it to all team members assigned to the project. The research team coded each of these questions with a Question ID, using the listing in the spreadsheet. This allowed the research associate to link a finding from an article to the question it addressed using the abbreviated Question ID. The questions and Question ID are in the appendix.

Bibliographic Databases

The Bibliographic Database appendix lists all the literature and news databases and other information resources, such as websites and books that SPAA used to find relevant information for LUARCC. The researchers and the project librarian knew certain resources were more comprehensive and relevant for this project. SPAA focused on Lexis/Nexis Academic as a resource for periodicals, including newspaper articles, journal articles, and legal documents; Academic Search Premier as the best resource for academic journals; Business Source Premier as a similar resource; and Public Affairs Information Service for government reports, monographs, and articles.

Search Terms

The search within the bibliographic databases and in other resources used the following terms:

- Efficiency measure/indicator/metric
- Productivity measure/indicator/metric
- Cost effective
- Cost-efficiency
- Cost measurement
- Performance benchmarking
- Comparative performance measurement
- Municipal benchmarks
- Performance comparison
- Cost accounting
- Operating cost benchmarking
- Managing for results
- Output cost analysis
- Outcome-based management
- Cost saving
- Municipal efficiency
- Total quality management
The searches always used the following additional governmental terms as limiters:

- Municipality
- Local government
- Borough
- Village
- Town
- Township
- City
- County
- State

Since the search engines differ in their filter capabilities (and the Boolean logic which drives some of them), the research associates used their familiarity with literature searches to make efficient search decisions. They focused on North American articles, cross-cultural studies that included the United States, or other articles, despite their geographic origins, if they were applicable to the subjects the Commission wanted to investigate in a New Jersey context.

Winnowing the search results while casting a broad enough net is not always easy, and never automatic, as our preliminary analysis showed. The research associates, with faculty guidance, used their expertise in the content area they investigated and their experience with literature reviews as doctoral students to make the searches practical and the results comprehensive and responsive.

**Reference Database – EndNote®**

SPAA summarized the important information from the articles and reports found in the literature searches in EndNote®, a high-quality bibliographic software program by Thompson Reuters. As part of its work products, SPAA will provide a copy of EndNote® to LUARCC with the on-line annotated bibliography for all five projects it completed. A printed copy of the annotated bibliography for this project is Appendix A to this report.

The findings are the core of the reference database and of this project. The findings contain a brief extract from the article or a summary of a key point that links the article to LUARCC’s questions. The following information is contained with the findings to provide a quick review:

- **Question ID** – this will contain a project designation and identify the specific question addressed
- **Finding** – a brief description of the finding, conclusion or discussion
- **Cases** – if it is based on an empirical study, the number of cases that support the finding
• **Basis** – reviewer’s evaluation of the substantiation of the finding in the source on a 0 to 4 scale. If there is no basis, it is rated a 0; poor evidence, a 1; some evidence, 2; well substantiated, 3; considered a fact, 4

• **Unit** – the government unit or region cited in the finding

It is not necessary to use EndNote® to make the most of the project completed by SPAA. Rather, the working details contained in EndNote® are there to support this report.

**Library of Documents**

Each article, or an appropriate extract from the article, report, book excerpt or other research document, has been stored and will be accessible in a separate file as a Word Document or PDF. LUARCC will be able to link to it from the EndNote® reference database that SPAA will provide as a final work product. It will contain the full text of appropriate parts of the information sources found. Hence, it will allow LUARCC or its staff to review the original information that SPAA has summarized, allowing the Commissioners to be confident about their decisions as LUARCC goes forward.

**Preparing the Final Report**

SPAA used the findings in the EndNote® annotated bibliography to organize the report for each project around the questions initially specified by LUARCC in the original RFP. In preparing the report, the faculty and project director reviewed the findings, interacted with the research associates who had found and read the articles, and, when warranted to resolve any ambiguity, read the original texts. This final review generated SPAA’s conclusions in this report. In addition to this report, SPAA will provide an overall summary report for all five projects it completed.
### Appendix C

#### RFP Questions

<table>
<thead>
<tr>
<th>RFP Question</th>
<th>Question ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through analysis of existing case studies, this work will examine attempts to measure productivity outcomes through the application of a methodology which is credible according to the investigator. The primary purpose is to ascertain whether there are methodologies of benchmarking, performance evaluation or “best practices” for determining the most efficient delivery of municipal services within the United States.</td>
<td>PM</td>
</tr>
<tr>
<td>How was efficiency measured?</td>
<td>PM1</td>
</tr>
<tr>
<td>Is there any correlation between size of service area for the delivery of a given service and efficiency and/or effectiveness?</td>
<td>PM2</td>
</tr>
<tr>
<td>What type of information was collected, and any changes that needed to be made in municipal record keeping to report the data consistently over time?</td>
<td>PM3</td>
</tr>
<tr>
<td>How was the information utilized?</td>
<td>PM4</td>
</tr>
<tr>
<td>Was the municipality compared to others in a larger geographic study or was the municipality compared only to its own progress over time?</td>
<td>PM5</td>
</tr>
<tr>
<td>Did evaluative studies identify cost savings which resulted in property tax savings through greater attention to municipal productivity?</td>
<td>PM6</td>
</tr>
<tr>
<td>Were there secondary benefits to the measurement of productivity that were identified in the case studies other than cost savings?</td>
<td>PM7</td>
</tr>
<tr>
<td>Were benchmarks established and if so, how was the benchmark utilized?</td>
<td>PM8</td>
</tr>
<tr>
<td>Were changes in government structure or other government reforms effectuated as a result of productivity benchmarking?</td>
<td>PM9</td>
</tr>
<tr>
<td>Were best practices established and if so, how were they established and how were they used?</td>
<td>PM10</td>
</tr>
<tr>
<td>Does the literature point to a model of efficiency measurement we might use in New Jersey to improve municipal service delivery performance?</td>
<td>PM11</td>
</tr>
<tr>
<td>What role did the State have, if any, in other States where serious attempts were made at measuring service delivery or was the impetus only from within the municipality itself?</td>
<td>PM12</td>
</tr>
</tbody>
</table>
APPENDIX D

BIBLIOGRAPHIC DATABASES

Academic Search Premier
Books in Print with Reviews
Business Source Premier
Catalog of U.S. Government Publications
Conference Board Research Collection
CQ Researcher
Eagleton Poll Archive
Factiva
Gartner Research
GPO Access
Historical Statistics of the United States: Millennial Edition
Human Population & Natural Resource Management
Index to Legal Periodicals Full Text
Investext Plus
Lexis/Nexis Academic
Lexis/Nexis Statistical
National Technical Information Service
New York Times
Public Affairs Information Service - International and Archive
SA ePublications Social Science & Humanities Collection
Social Sciences Full Text
Statistics Canada's E-STAT
TV-NewsSearch: The Database of the Vanderbilt Television News Archive
Value Line Research Center
Wilson OmniFile Full Text, Mega Edition
Worldwide Political Science Abstracts

Other Information Sources

Research and Information Resources for Public Administration
Using the Political Science and Government Literature
Public Performance and Measurement Review
http://spaa.newark.rutgers.edu/sharedservice.html
SPAA's Public Performance and Reporting Network