

# The Municipal Partnering Initiative: Mixed Contracting in Local Government Procurement

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## Introduction

The Municipal Partnering Initiative (MPI), which formally began in 2011 in the northern suburbs of Chicago, can be described as an instance of mixed contracting. Mixed contracting occurs when multiple public agencies jointly contract services with a nongovernmental agency for service delivery (Warner and Hefetz 2008). This is in contrast to joint contracting, which connotes a public entity contracting out some service to a private or nonprofit organization singularly. More than 24 local governments in the MPI jointly craft mutually agreed-upon bid specifications for public works, constructions, and administrative shared services through compromise and discussion. Contracts with contractors are crafted to include all of the participating communities, with contractors working with the various communities to schedule their construction season. There are no memoranda of understanding, fees, or membership to be involved in the MPI, and communities have participated from four counties as of 2013: Cook, Lake, McHenry, and DuPage County. The participating communities are listed in Table 1.

MPI services include the following: crack sealing, resurfacing, concrete, sewer lining, sewer TV, leak detection, hydrant painting, emergency contractor assistance, water meter service, cold patch, hauling and delivery, line painting, bridge inspections, janitorial, asphalt patching, tree trimming, street sweeping, sewer cleaning, generator maintenance, HVAC maintenance, utility locates, manhole rehab, valve turning, tree removal/stump grind, EAB treatment, uniforms, auditing services, inspectional services, and landscaping.

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**Table 1** MPI communities

MPI survey respondents		MPI communities—non-survey respondents
Arlington Heights	Lincolnshire	<i>Clarendon Hills</i>
Buffalo Grove	Lincolnwood	<i>Evanston</i>
Cary	Morton Grove	<i>Fox River Grove</i>
Glencoe	North Chicago	<i>Gurnee</i>
Glenview	Northbrook	<i>Lake Zurich</i>
Glenview Park District	Northfield	<i>Lindenhurst</i>
Grayslake	Skokie	<i>Park Ridge</i>
Highland Park	Vernon Hills	<i>Woodridge</i>
Kenilworth	Wheeling	
Lake Bluff	Wilmette	
Lake Forest	Winnetka	

## Research Context: Region and History

### *Region*

It will be useful to define the region in which the MPI has occurred. When compared to the 50 largest metropolitan regions according to population as of 2002, Hendrick (2011, p. 101) states that the Chicago metropolitan region contained the highest concentration of local governments (1451 local governments) within its boundaries. The second highest was the New York City metropolitan region’s 1321. The number of local governments per capita is used as a measure of political fragmentation and the number of local governments per square mile as a measure of spatial fragmentation (Hendrick 2011, p. 101). The communities that make up the MPI have a median household income of \$ 110,174, nearly double the US median household income of \$ 52,762 and the Chicago metro region’s \$ 61,985 (U.S. Census 2010; CMAP 2011).

### *MPI Program Introduction: Logistics*

MPI-bid services range from road resurfacing, crack sealing, auditing, and information technology. The service contracts are the sole binding document in the MPI. Each community in the region is free to participate or not in any MPI contracts. During annual early spring MPI meetings, communities tentatively commit to participating in any of the given services in the MPI. In an attempt to find the ideal configuration for each contract service and determine complications in the bid specifications that may be affecting the contractor’s previous performance, the MPI conducts postservice interviews with communities and contractors. In the first

year of the MPI, the village of Glenview took on a majority of the contract and bid specification duties. Glenview does not charge a fee for this service, nor does involvement with MPI necessitate that a community contribute to the contract administration of any contract within the MPI. However, there is an understanding among the communities that each partner will contribute in their own way when possible to contract administration tasks. Many become the main contact for a service for 1 year and lead the efforts involved with securing that particular service. For example, in 2013, the 15 joint bids issued by the construction committee were led by 11 different communities.

At the outset of awarding a bid, the contractor works with each participating community to create a schedule for service delivery. Some smaller communities have emphasized the balance they must weigh when contracting with the MPI; while contract costs may be lower due to leveraging economies of scale, it can be at the expense of being able to choose their place in the construction season schedule. Some community administrators have expressed frustration at their perception that larger municipalities get priority scheduling.

Each community is responsible for paying the contractor and monitoring its own contracts. It is important to note that joint purchasing language included in the joint bids allows other communities to participate after the bids are received, known as “piggy-backing.” MPI administrators prefer that communities participate from the beginning of the bidding process because more quantity at the outset can amount to a lower unit price. The ability for communities to piggy-back on a contract can also make it difficult to know which communities are utilizing the MPI-bid services, this happens because participation is self-reported.

## ***MPI History***

In 2010, Glenview and three other communities (Morton Grove, Wilmette, and Winnetka) made a mixed-contracting trial of four communities jointly contracting for crack sealing. Crack sealing is a program designed to extend the life of streets. Crack sealing is typically performed 3–5 years after the street is resurfaced because cracks develop on the street surface due to the weather. Cracks resulting from routine wear and tear need to be sealed as they develop to prevent moisture and road salt from seeping into the base, which can lead to potholes and more serious road failures.

To construct the joint contract, members of each community, from city managers to public works technicians, convened to create a single bid specification for all four communities concerning crack sealing delivery. Each community previously had different service specifications, especially in their contract legal boilerplates. Through compromise, with some communities decreasing the strictness of their language and others increasing their contractor expectations, the four communities together created a mutual bid document. They then advertised, received bids, opened the bids publicly, reviewed them, and signed a single contract for service.

Glenview convened 18 communities in early 2011 to discuss a larger joint crack-sealing bid as well as other possibilities after sending out a survey to determine which services were routinely outsourced in the region. The survey identified roughly 40 commonly-outsourced services and commodities. These included services that each community outsourced every year. Based on that list, two committees were formed. The Public Works Committee relates to maintenance-type activities. The construction committee consists of sewer lining, road resurfacing, and other more engineering-intensive services. According to MPI administrators, the participating communities generally tended to bid the same projects every year and were in moderate fiscal shape coming out of the recession. The MPI administrators also searched for politically-stable communities. For the first year, communities were located in Lake and Cook Counties. All the Lake and Cook County communities that were chosen, shared borders.

MPI-participating communities emphasized that they wanted to maintain their current levels of service. Even in working together, stretching village or city money, services to the residents were expected to remain the same, if not improve. As Glenview was able to bring on 10 additional communities, the 2010 crack sealing contractor extended the length of the 2010 contract 2 years and also lowered its unit price from \$ 1.00 to 0.99, eventually to \$ 0.98 in 2012. In 2011, the MPI also added construction projects: street resurfacing, concrete, and sewer lining. These projects were chosen because they were maintenance services that nearly all of the participating communities participate in every year. One of the results of joint bidding is decreasing the amount of staff time needed in each community for each project bid. Instead of having 10–12 engineers from each community putting the bid package together, 10–12 attorneys reviewing it, 10–12 purchasing agents reviewing and advertising for it, the MPI produced 2 or 3 bid packages with only 1 or 2 engineers or attorneys.

According to Glenview staff, one of the largest hurdles to overcome was the difference in bid specifications. For example, concerning the MPI's first road resurfacing bid, one MPI administrator from Glenview said that even after working in road projects for many years previously, he had never known that there were so many different kinds of asphalt mix, with each town having its own mix. However, through compromise, communities were able to overcome some of these differences in specifications. In the first two of the MPI's yearly contracts for road resurfacing, with five communities in 2011 and eight communities represented in 2012, there were two contracts awarded each year, one each for Cook and Lake Counties, with each community within the county group having identical bid specifications. In 2013, road resurfacing has three separate contracts, and concrete services had five contracts. Concrete services for curb/gutter and sidewalk used to be bid together but are now being bid as separate services. MPI administrators have found that while some services benefit from increasing economies of scale, others benefit from geographic proximity to best economize mobilization costs.

In addition to geographic concerns, the MPI has had to accommodate communities with different budget years. Some communities operated under a January first fiscal-end year, while others ended in May or June. When appropriate,

municipalities are grouped according to budget year. When division was not feasible, the MPI does insert a clause into the bid document giving, for example, 100 days to award a bid, allowing communities flexibility to award contracts when they see it as advantageous. Concerning contract scheduling, communities demonstrated trepidation about losing an element of control in choosing when the vendor would provide the service during the construction season. This requires compromise, and when services are delayed due to weather or other extenuating circumstances, scheduling conflicts between communities have been the cause for consternation. In some situations, the MPI simply picks communities' names blindly out of a hat to choose scheduling. The MPI has demonstrated flexibility for communities that change position in the schedule due to changes in street selection and other decisions.

In the first year, 2011, the MPI awarded 11 joint bids with 20 communities. Glenview administrators state that, initially, it was challenging to find an individual to lead joint bids outside of Glenview. One Glenview administrator likened it to trying to find friends to help one move, saying that there is a lot of verbal support, but when one tries to set a date, it can be a little challenging. Glenview staff says that in 2011, there were many compromises, and Glenview did take on a majority of the bid specification work and coordination. However, after the first year, many of the joint bid documents did not vary greatly from year to year. MPI communities have created a list of responsibilities for those who would be leading a joint bid such as coordinate, schedule meetings, make any minor changes, receive the bids, and distribute them at the very end. After bids are received by a community, just as if each community were doing a bid contract in their own town, it is their responsibility to award and monitor the contract as the service is delivered.

### ***Early MPI Obstacles***

Glenview staff identified obstacles early in the MPI process and has reflected on how they attempted to overcome those obstacles. Initially, other communities' municipal staff were concerned about losing or ruining relationships with contractors with whom they have had a relationship over many years. Some contractors have worked collaboratively with staff for many years, and their relationship was valued by municipal employees. However, Glenview administrators observed that some previous contractors have been able to successfully bid for MPI contracts, scheduling an entire construction season of work with 15–20 communities with one contract. Also, municipalities have numerous smaller contracts for construction and public works projects outside of the annual main contract. Smaller contractors can still bid on these other projects. There was also concern among municipalities about the multigovernmental impact of an MPI contractor going out of business or not performing up to specifications for large MPI projects. There has been a multipronged response in order to guard against contractor failure, largely in part due to the previous failure of the Northwest Municipal League's crack sealing contractor in 2008; including provisions to allow the village and its partners to cancel

a contract within 60 days of the award due to poor performance if necessary. The 2008 contract was forfeited due to the contractor not being able to complete work on schedule.

***MPI Cost Savings: Current State of MPI***

Cost savings calculations are left to each community within the MPI, some utilizing line item and unit price comparisons from years earlier or comparable communities or projects. The Glenview staff creates an aggregate savings presentation each year for MPI communities based on the cost savings estimates they receive and their own calculations. An example of a single service cost savings calculation is presented in Table 2.

Cost savings are calculated by Glenview staff by examining comparable line items between participating MPI prices and similar area communities’ non-MPI prices, allowing for a range of savings from their calculations, depending on the scale of the projects. Savings over unit prices are multiplied by the number of communities participating. A summary of cost savings is created for a presentation to the MPI communities at the end of the construction season each year. The range reflects the combined variability incorporated into the cost savings, as calculated by Glenview staff, see Table 3.

Glenview has not attempted to calculate the *administrative* savings for the whole MPI area due to decreased staff time on bid creation and advertisement, nor have communities calculated the exact cost savings of moving from in-house production of a service to an MPI-administered outsourced service.

***Variety of Intergovernmental Joint or “Mixed” Purchasing***

There is variety of area pooled purchasing models listed in the following section. These pooled or mixed purchasing pools exist in various states of completion (Western Cook County at the young end of the spectrum and the Illinois Purchasing Bulletin more than 30 years old) and in varying network structures (COG-centric versus Municipality-centric versus state-centric). Comparing and contrasting these models illuminates the strengths and weaknesses inherent in each. One common

**Table 2** MPI crack sealing cost savings calculation. (Source: Village of Glenview Staff Report (2011))

Crack sealing				
	Participants	Totally project value	Unit cost per pound	Vendor
MPI	14	\$ 557K	\$ 0.9968	North Suburban
Cook county communities		\$ 35K	\$ 1.15	North Suburban
MPI savings—\$ 54–64K				

**Table 3** Summary of cost savings—Glenview staff report. (Source: Village of Glenview Staff Report 2011)

Project	No. of communities	Total project value	Savings (\$ 1000)
Crack sealing	12	\$ 421,000	\$ 50
Resurfacing (lake)	3	\$ 2,990,000	\$ 100–120
Resurfacing (cook)	2	\$ 2,840,000	\$ 80–100
Concrete	8	\$ 966,000	\$ 15–20
Sewer lining (group one)	5	\$ 1,090,000	\$ 3050
Sewer lining (group 2)	7	\$ 945,000	\$ 60–90
Sewer televising	4	\$ 365,000	\$ 16–26
Leak detection	5	\$ 71,000	\$ 3–5
Hydrant painting	6	\$ 60,000	\$ 8–10
Water meter testing	3	\$ 20,000	\$ 0.5–1.5
Emergency contractor assistance	11	\$ 150,000	\$ 27–37
Total savings—\$ 389–529 K			

theme appears to be that many communities began their joint or mixed contracting programs with a survey to interested communities, listing services each community commonly contracted out, also asking each community to register their level of interest in jointly contracting for that service. At some point during the formation process, the groups must decide the degree to which the communities will be legally bound together, either through MOUs, letters of intent for each service, membership which may or may not include payment, or in the MPI’s case, none of the above.

When considering the MPI and where it rests within the many permutations of pooled procurement, it is important to contrast it with other configurations. In some instances, the MPI was directly affected by the pooled purchasing group to be mentioned. In other instances, alternative models are proposed, which may highlight the unique qualities of the MPI.

### *Lake County Municipal League*

Lake County Council of Government’s mission is to serve as a vehicle for member municipalities to take joint action on matters affecting the Lake County area. Membership is open only for Lake County communities and costs an annual \$ 500. The organization currently serves 38 communities. Besides promoting the interests of its members in the region and Illinois capital, for the first time (starting in the 2013 construction season), the COG offered three road-related joint purchasing services for joint purchasing: crack sealing, pavement marking, and street sweeping. There are currently no administrative fees for municipalities associated with joining

the bids. The bid writing, advertising, and coordination was a mutual effort by the LCML executive director and Lake County community administrators.

The three services for the first year were chosen out of a dozen which were identified as possible services to be jointly bid, determined by a survey sent to interested communities in Lake County earlier in the year. At the beginning of the bid creation process, communities signed a letter of intent to be a party to the upcoming joint-bid contract in which communities include their desired quantity of service based on mutually-agreed-upon general bid specifications, with variations remaining from community to community. Communities are committed by the letter of intent to remaining with the joint bid through the process unless, after the bid prices had been received from contractors, a majority of the communities decide together not to use the bid and instead contract independently, which did not happen with any of the three contracts in the first year. Each community signs and awards its own contract with the contractor with the pre-arranged bulk price for all. This is in contrast to the MPI model where all the participating MPI communities sign the same, single contract with common boilerplate language.

### ***Northwest Municipal Conference***

The Northwest Municipal Conference (NWMC) was founded in 1958 and represents communities north and northwest of Chicago, many of which are in the MPI. Currently, 42 communities and one township belong to the Council of Government. Involved with the NWMC's mission is the Suburban Purchasing Cooperative (SPC), a joint-purchasing program. Together the SPC represents 137 municipalities and townships in the northeastern Illinois. Focusing on providing bulk purchasing goods, such as vehicles, liquid calcium chloride and natural deicing liquid (beet juice) for snow removal, and office supplies, the only road project the SPC offers wherein a contractor performs a service in the community directly is pavement marking, a service the MPI also offers.

It is important to note that the SPC did offer crack sealing joint contracts and lane marking as recently as 2008. In 2006, SPC crack sealing prices were \$ 0.987 per pound with a two cent per pound administrative fee added. 2007 contractor prices came to \$ 0.951 per pound with the same administrative fee, coming to \$ 0.971 per pound for communities. In 2007, 29 municipalities participated with an estimated 692,000 pounds of sealant. The 2008 SPC crack sealing price for 16 communities came from Complete Asphalt Service at \$ 0.987 per pound, in addition to the same administrative fee. Due to the failure of the contractor meeting contract dates in the Northwest Municipal Conference's 2008 Crack Sealing Program, the contract was forfeited before completion, after which the NWMC chose to discontinue its joint crack sealing program, leaving communities in 2009 to bid their own crack sealing programs. The NWMC vendor default made MPI communities sensitive to the impact of vendor difficulties. In 2010, the MPI began joint bidding with the four original communities.



## ***Challenges***

There were many challenges faced by MPI administrators when creating the MPI, and there are many challenges still being faced by communities both participating and otherwise. One of the perennial challenges in the region is the maldistribution of taxable resources, be they property or sales tax. This disparity results in competition in the realm particularly of economic development, which can have lasting impacts in social capital and intergovernmental relations in the area (Stephens and Wikstrom 2007, p. 94). Governments in fragmented systems, experiencing competition and perceiving the struggle as a zero-sum gain have less motivation to collaborate or to “provide goods and services that generate positive externalities, or to reduce services that generate negative externalities” (Hendrick 2011, p. 102).

Adaptation is necessary because Chicago metropolitan communities have experienced changes in their various revenue bases for many years, which creates fiscal stress or munificence for these governments (Hendrick 2011, p. 113). According to (Hendrick 2011, p. 114): “Although... many government recovered from the 2001 recession by 2005, the situation changed dramatically for them in the first 6 months of 2009... sales receipts fell by a record \$ 5.8 billion, or 11.5%, in the Chicago metropolitan region compared to the same period a year prior.”

## **Methods**

In order to understand the intergovernmental and economic dynamics that contributed to the MPI, the researcher attended and reviewed various presentations on the MPI given by Village of Glenview Staff, researched the history of joint purchasing in the Northern Illinois area, and examined other models of pooled purchasing for comparison and contrast to the MPI model. Simply comparing prices between 2010 (Pre-MPI) and 2011 (MPI years) would not result in accurate cost savings estimates, due to variations in contract size and scope that could distort price differences. Instead, tracking prices 3 years before the MPI (2008–2010) and 3 years during the MPI (2011–2013) better reflect trends in cost. Finding these figures required a survey to be generated and sent to the MPI communities. Qualitative questions were added to the survey to determine whether the MPI adapts to new information and if there are lessons to be learned from the MPI’s experience.

This paper is intended to examine both the cost savings and interorganizational dynamics that influenced the MPI’s creation and continuing services. The research questions are:

- What were the intergovernmental dynamics that lead to the MPI?
- Have the communities that are involved saved money as a result of their participation?
- How has the MPI evolved since its inception?
- Are there lessons to be learned from the MPI’s experience?

The hypotheses are:

Hypothesis 1: All communities involved will save money on unit pricing of the three examined road services due to increased economies of scale.

Hypothesis 2: MPI service contract sizes will change the number and configuration of communities involved in each service in an attempt to find the ideal size for cost savings.

## *Survey*

Investigation of the contract data available online going back to 2008 revealed incomplete records. A survey was needed to collect procurement data. An International Review Board-approved survey document was sent to the 24 MPI communities (as identified by the staff at Glenview) via email. The survey was sent in the summer of 2013 as a fillable form that could be filled online and sent back electronically. The researcher remained in frequent conversation with the survey recipients while surveys were being completed. See Table 1 for survey respondents.

The survey was created to collect two kinds of information: procurement and qualitative. First, the survey collected procurement data from the years 2008 to 2013 in the jointly-contracted service provision of crack sealing, concrete sidewalk replacement, and cold patch. For each service, the survey also collected quantity of services. The survey captured the variations of how services were specified and delivered before the MPI in order to determine if there were significant differences in service provision before and after the MPI that may have influenced prices and cost savings experienced by communities. The procurement questions presented for 2011–2013 are the same as for 2008–2010. A total of 12 completed surveys were returned with at least some procurement and all qualitative questions answers. An additional eight organizations responded with only qualitative questions answered, for a total of 20 responses with at least some useful information. This comes to an 83.5% response rate for qualitative questions and 50% response rate for quantitative questions. Further quantitative data was obtained by research from MPI community municipal minutes.

The data were used to examine how prices from MPI-area communities have changed over the 6-year period, before and after the MPI. The data indicate only line item unit prices, such as cost per ton. Contractor labor is factored into cost per pound for fiber-based crack sealing, as well as concrete sidewalk replacement, whose cost in this paper is calculated by cost per foot. Both services involve contractors supplying both material and labor, which distinguishes these MPI services from simple bulk purchasing programs (U.S. Energy Information Administration, Illinois Department of Labor, Illinois Department of Transportation). This paper will look specifically at five-foot-wide and five-inch-thick concrete sidewalk, which is a common size for which most municipalities contract. Cold patch is a product used to fill potholes and small road issues without the need for heating equipment. Cold patch is purchased in bulk in tons, and the municipalities supply the labor of patching roads spots.

The years in which data were collected (2008–2013) represent a very tumultuous time in municipal government service provision and contractor pricing, largely due to the recession. Cost changes experienced post 2008 will be impacted by the recession, which may have reduced service provision costs due to a level of desperation for contractor work regardless of the MPI's economies of scale. In order to account for the impacts of the recession and other factors, the author has aggregated various road construction-related price indices, including fuel cost, civilian employee cost per hour, bituminous asphalt (most basic and common road asphalt) price, and standard concrete price. Employee cost and the ready-mix concrete cost index data come from the Bureau of Labor Statistics. Fuel information is specific to the Midwest and comes from the U.S. Energy Information Administration. Bituminous Asphalt price indices come from IDOT's annual reports on commodity prices for road construction. Illinois Department of Transportation. (2013).

This survey attempted to collect data from communities in the MPI area that did not use the MPI for services, to provide a comparison to MPI prices. The author collected 2008–2013 procurement data from six neighboring DuPage County communities, none of which have contracted with the MPI or participated in pooled-purchasing services for the three services examined. The number of DuPage community procurement data ranges from service to service and year to year, ranging from only a single community's data in one service year to six. The small amount of data for some service's years negatively impacts the DuPage County group's usefulness as a comparison. Surveys also collected the opinions of MPI communities in short answer format.

## ***Calculations***

Procurement data were collected for each of the three services for the 18 communities over the 6 years of 2008–2013. Prices were separated into MPI and non-MPI, and averages were collected for each service each year. In order to calculate price changes in dollars in 2013, averages of previous years were altered to account for inflation. These averages were then compared across the years collected.

Due to the impact of self-selection that determined whether communities will respond to an MPI-related survey, most communities that responded with procurement data regularly contracted with the MPI post 2010, leaving the author with a small sample of non-MPI procurement figures post 2010, particularly in crack sealing services. Additionally, at least six of the communities that did not participate in the MPI crack sealing bid between 2011 and 2013 did not perform crack sealing. Another issue with self-selection that must be taken into mind when analyzing the data is the bias toward larger organizations responding with procurement data over smaller organizations. Since smaller organizations would be more likely to experience cost savings related to economies of scale, and the impact of the MPI could be more significant for smaller communities. Their experience is not as well documented in the procurement data.

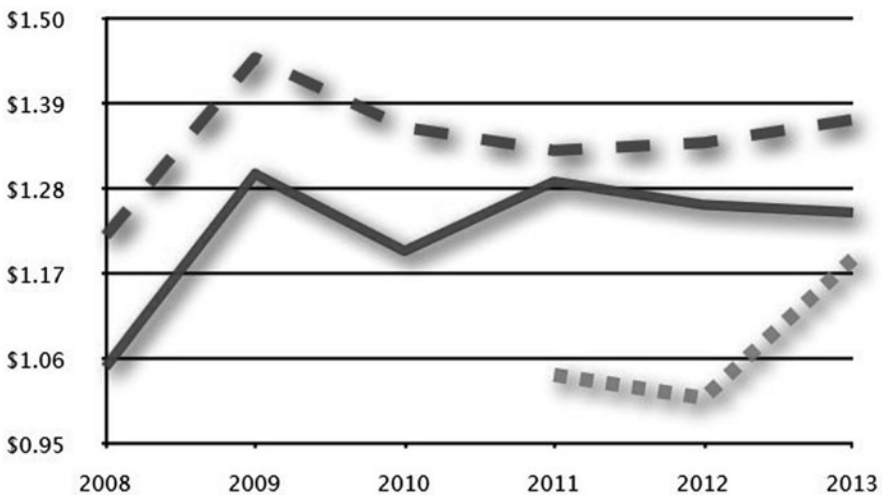
It must be noted that these figures represent only three of the MPI program’s many services that are jointly contracted, and they do not reflect the experience of other services. These price comparisons also do not reflect any changes in staff hours worked extra or saved due to the MPI, in addition to advertising and bid creation costs saved due to consolidated contract administration. On the other hand, much staff time was invested, especially initially, in order to create the MPI, the costs and savings of which are not reflected in this analysis.

## Results

### *Contract Data Analysis*

Figure 1 presents the average unit price of crack sealing per pound, rubber-based from 2008 to 2013 for each of the three groups, non-MPI, MPI, and DuPage County. It is possible that the MPI is affecting vendor prices in the region, possibly driving down prices for non-MPI communities in order to compete with MPI prices. Conversely, price for non-MPI communities could increase because the number of vendors might decrease as large vendors who contract with the MPI dominate the landscape.

In an attempt to demonstrate the market forces that influence the price of selected contracting services, the following costs of essential construction items have been collected below, with all figures being represented in 2013 dollars: Illinois highway



**Fig. 1** Crack sealing 2008–2013 price comparison (price per pound). *Solid Line* non-MPI price, *Square Line* MPI price (2011–2013), *Rectangular Line* DuPage community price. *Note:* This graph and all below reflects inflation-corrected values to represent all values in 2013 dollars

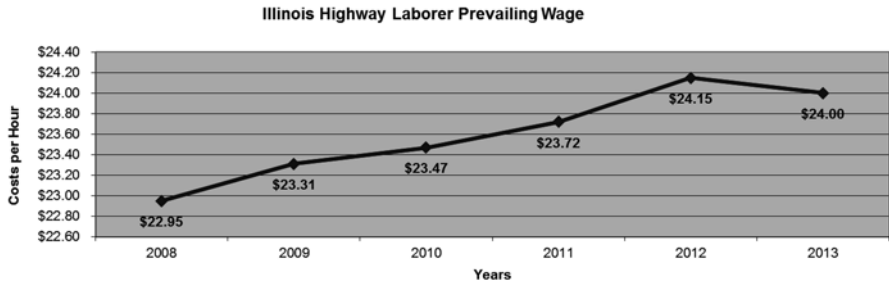


Fig. 2 Illinois highway prevailing wage 2008–2013

laborer prevailing wage, bituminous asphalt, fuel, and concrete pavement. Employer costs for employee compensation demonstrate employment costs for contractors per hour on average. Bituminous asphalt (a basic component for petroleum-based road products) figures were collected from IDOT’s yearly survey of roadway-construction-material costs. Illinois Department of Transportation. (2013). Fuel information is specific to the Midwest and comes from the U.S. Energy Information Administration. Concrete prices are Bureau of Labor Statistics National Ready-Mix Concrete Index (the industry standard for concrete construction).

One can see in Figs. 2, 3, 4 and 5 that fuel, labor and asphalt (made from the same basic materials as crack sealing) have increased while MPI community prices have stayed at or below 2010 prices. As mentioned during the history of the MPI, prices fell from 2010 to 2012 due to an increasing number of communities participating in the MPI price, with administrators renegotiating the price lower each year with the same contractor as communities continued to join and MPI administrators refined the mixed-purchasing method. The sharp rise from 2012 to 2013 is the result of the MPI communities contracting with a new vendor after the MPI vendor’s president, Alan M. Harris, was charged with theft of government property and mail fraud in 2012.

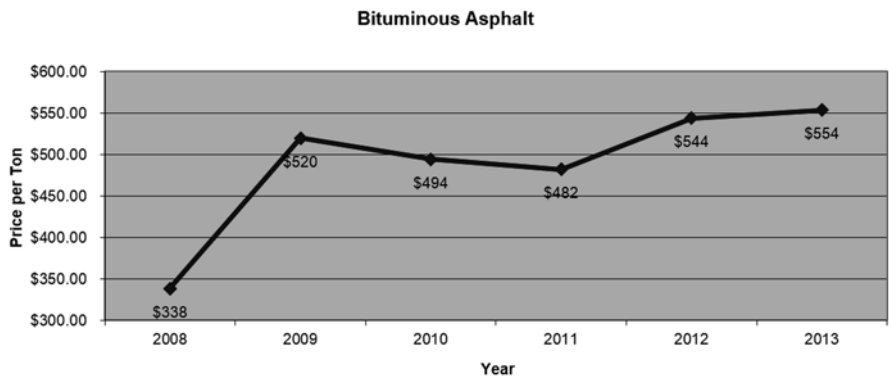


Fig. 3 Asphalt cost 2008–2013

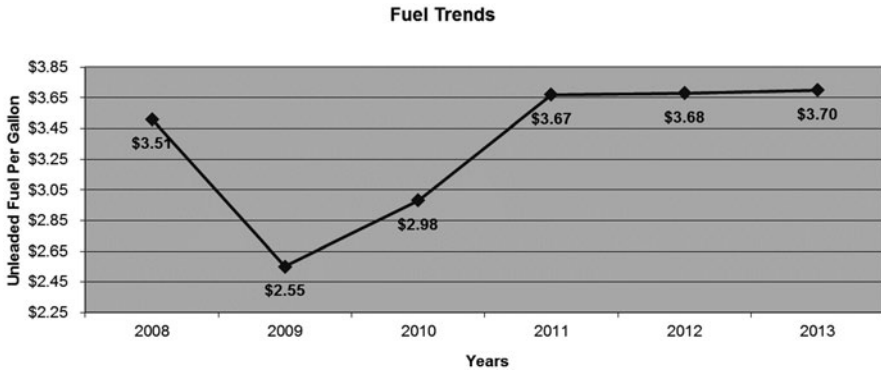


Fig. 4 Fuel cost numbers 2008–2013

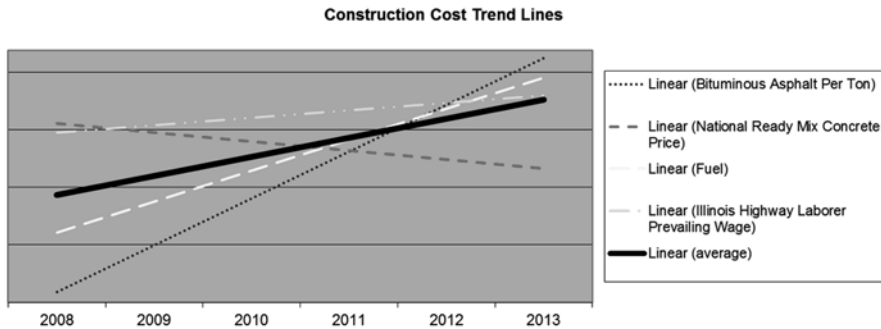
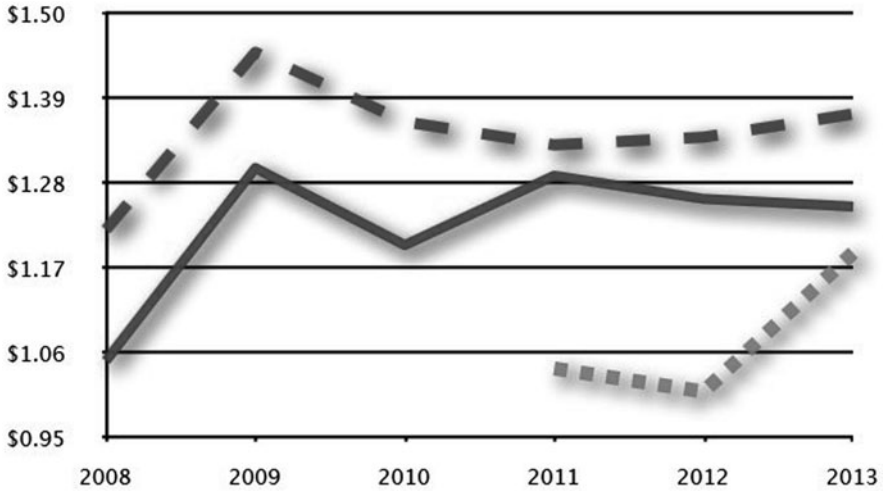


Fig. 5 Construction cost trend lines 2008–2013

One lesson taken from analyzing the crack sealing procurement data is the challenge of interpreting the collected data to explain variations in pricing alone. Each year, communities may dramatically change the scope and quantity of a service, contractors’ prices may vary depending on the economic climate, and in such an interconnected area there can be many permutations of joint purchasing that impact pricing. MPI prices remain below the non-MPI or DuPage county prices from year to year.

### *Sidewalk Replacement and Reconstruction Analysis*

Figure 6 presents the variable nature of the procurement data for sidewalk replacement and reconstruction. One can also see the non-MPI prices rising during the 2011–2013 years in contrast to the MPI pricing which has consistently remained near or below the 2008–2013 average. MPI administrators in 2013 broke concrete services into seven groups in order to achieve best costs, which follow the hypothesis that MPI contract size would continue to be adjusted in an attempt to find the best prices.

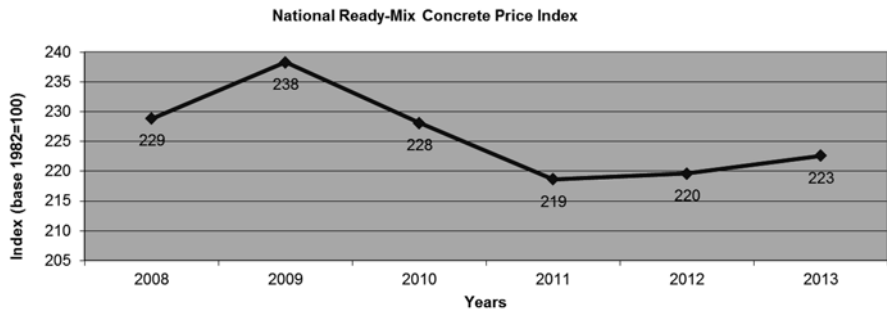


**Fig. 6** Concrete sidewalk replacement (price per square foot): 2008–2013. *Solid Line* non-MPI price, *Square Line* MPI price (2011–2013), *Rectangular Line* DuPage community price

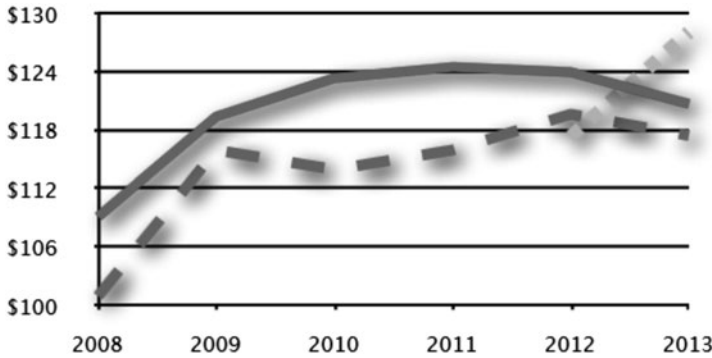
Figure 6 presents an increase in commodity prices from 2008 to 2009 followed by a decline until 2011. Despite the decline in value of concrete from 2009 to 2011, communities continue to pay increasingly more per unit (Fig. 7). This is likely due to the impact of other cost drivers in contracted service delivery including increases in fuel and labor (see Fig. 6). However, from 2011 to 2013, MPI prices came in below non-MPI and DuPage prices. Only the MPI-participating communities have been able to experience reduced costs during the 2011–2013 periods.

### Cold Patch

Figure 8 above shows that cold patch prices among MPI communities and a single DuPage County community (Glen Ellyn) are lowest at the beginning of the data



**Fig. 7** Concrete pavement cost 2008–2013



**Fig. 8** Cold patch (price per ton) 2008–2013. *Solid Line* non-MPI price, *Square Line* MPI price (2011–2013), *Rectangular Line* DuPage community price

recorded for this paper in 2008, with an increase over the next 5 years followed by a drop-off in 2013. MPI-area communities encounter a small dip in price in 2012, when the MPI first began its cold patch purchasing pool. One can see the non-MPI average price of 2013 achieving a lower price than MPI.

### Price Comparison for Cold Patch

One can see in Fig. 3 the climbing of asphalt cost from 2008 to 2013 mirrored by the data collected locally until 2012. When the MPI begins its cold patch service in 2012 (Fig. 2), one can see a sharp contrast between the increase from 2011 to 2012 in the asphalt cost and the MPI price’s dip. The increase in the average may also be partially explained by the percent of communities using unique paving material (UPM) increased from 86% in the pre-MPI years of 2008–2010 to 100% from 2011 to 2013. UPM is a premium cold patch material that costs more than standard cold patch material. One would expect an increase in average price with an increase in the ratio of UPM versus cold patch in the MPI prices. While the MPI communities experienced an increase from 2012 to 2013, their cost has remained nearly the same from 2011 to 2013. The 2013 bidding process involved a single bidder which may explain a less-competitive price. It must be noted that the non-MPI communities experienced lower prices than the MPI communities, decreasing from 2012 to 2013.

### Hypothesis Testing for Qualitative Analysis

Hypothesis 1: All communities involved will save money on unit pricing of the three examined road services due to increased economies of scale.

There is insufficient evidence to support Hypothesis 1 due to the complicating factors of the recession, along with changing commodity price, bid specifications, and project size. According to results from the MPI survey, for crack sealing and



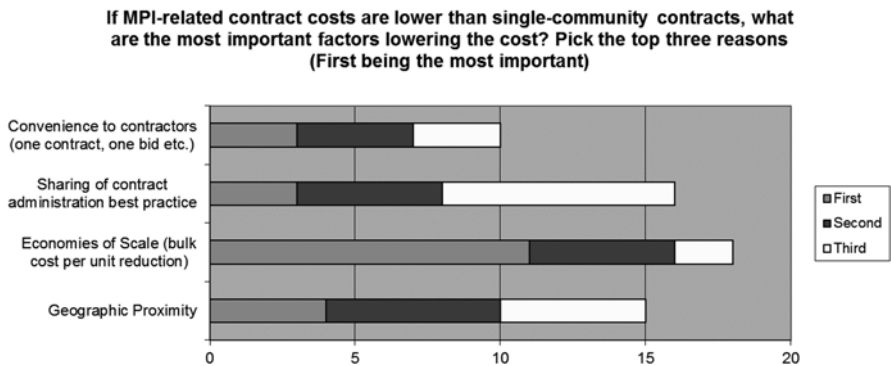
concrete sidewalk services, MPI prices were lower than area nonparticipating communities. For cold patch, responding non-MPI communities achieved a lower unit price compared to the MPI. This analysis does not take into account administrative costs or savings. It is also unclear what impact MPI pricing has had on prices achieved by other communities. It is likely that the pooled purchasing program has had an impact on the vendor population, creating opportunities for larger vendors and decreasing opportunities for smaller vendors less capable of fulfilling multiple-community contracts with the MPI. If smaller organizations cannot thrive or adapt in the new atmosphere of pooled purchasing, competition may decrease for contractor services. Lower unit prices for MPI communities may also influence other area communities to demand lower prices from vendors.

### *The MPI Experience: Questions to MPI Communities*

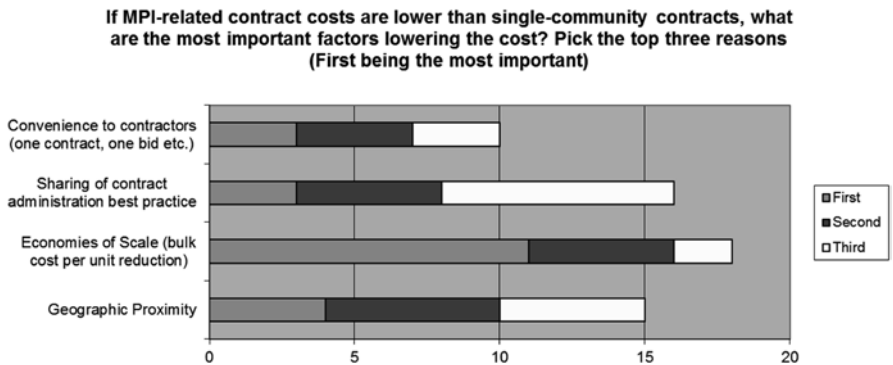
The survey asked communities many questions concerning how they feel about the MPI. For the purpose of comparing answers based on population, municipal populations are divided according to the United States Census with small being zero through 24,999; medium being 25,000 through 64,999; and large being 65,000 and above (U.S. Census Bureau).

#### **Why MPI Costs Are Perceived To Be Lower (If They Are)?**

Respondents ranked their top three reasons why MPI prices would be lower than individually-bid contractor services: geographic proximity, economies of scale (bulk cost per unit reduction), sharing of contract administration best practices, and convenience to contractors (one contract, one bid etc.). Figure 9 suggests that communities believe, MPI savings are most significantly derived from economies of scale experienced by pooled purchasing. Geographic proximity and convenience



**Fig. 9** Why are MPI costs lower



**Fig. 10** Reasons for joining MPI

for contractors are similarly placed in the second choice for cost savings, while sharing of contract administration best practices has the lowest average score and number of respondents.

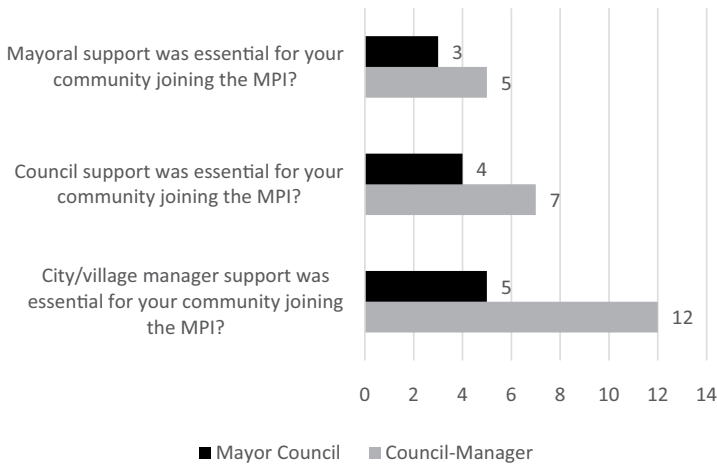
**Why Participate in the MPI?**

Communities ranked the top three reasons their organization became involved with the MPI. Communities do not officially join the MPI but rather can choose freely to participate in contracts or not. Previous experience with joint contracting was rated as the most important reason for choosing to participate in the MPI (see Fig. 10). It is rated as more important than the financial crisis. This is significant because this speaks to the suggestion in intergovernmental relations literature that an organization’s likelihood to participate in ILAs or joint service contracts increases as the number of agreements increase. The recession is also highly ranked as a reason to participate in the MPI, supporting Westley and Vredenburg’s (1991) theory that fiscal and environmental stress increase an organization’s likelihood to work intergovernmental to find solutions to the issue. Professional associations encouraging shared service delivery was the most likely second top reason for joining the MPI.

**Mayoral, Council, and Manager Support**

MPI administrators assessed to what extent mayoral, manager, and council support was essential for their community joining the MPI. Responses for mayoral and council support are similarly in agreement for both forms of government when accounting for the higher number of Council-Manager governments in the MPI area (Fig. 11). However, form of government has a large impact on the importance of the manager support in partnering with the MPI. Council-Manager governments are

### Manager, Council, and Mayoral Support



**Fig. 11** Mayoral, council, and manager support

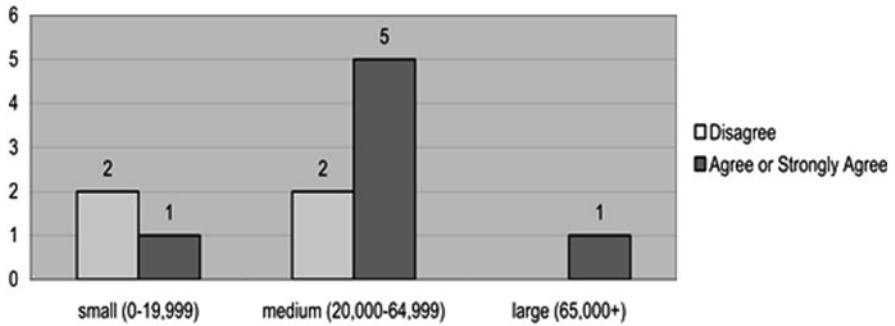
more than twice as likely to believe that manager support was essential compared to Mayor-Council governments.

### Distribution of MPI-Related Duties

The question: “My community would be comfortable taking on more responsibility of MPI contract administration,” is intended to find how MPI responsibilities can be distributed among the communities. Though much of the initial contract work was done by Glenview staff, 11 of the 15 contracts with the MPI in 2013 are being led by communities other than Glenview (Fig. 12). There is a clear break between small and medium communities concerning their comfort level in taking on more MPI-related responsibilities. Among small communities, the level of interest is negative, with only one community in agreement and two disagreeing. Medium-and-large-sized communities are more comfortable taking on more responsibilities. This survey was sent after the 2013 MPI contract work had already been more evenly distributed to 11 communities, so this question is assessing whether communities would be comfortable taking on even more of the workload.

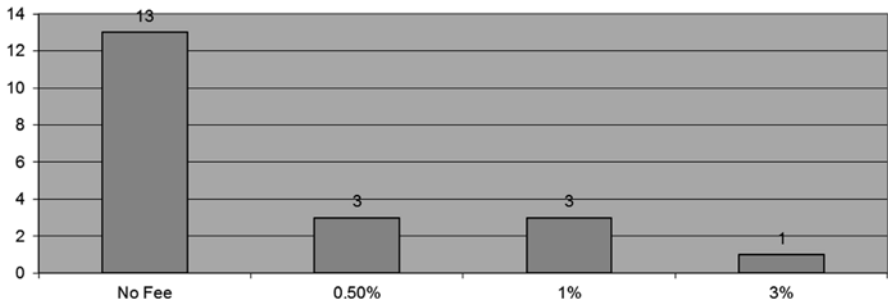
While small communities respond more negatively to taking on more MPI-related responsibilities compared to large and medium-sized communities, small communities respond comparatively more favorably when asked whether they would pay a fee MPI for services (Fig. 13). Medium-sized communities lean toward disagreement, along with a single larger community. One MPI-community public works director expressed the irony that small communities often have the least to offer in terms of money or resources for joint contracting, but they often have the

**My community would be comfortable taking on more responsibility of MPI contract administration.**



**Fig. 12** Contract administration duties

**My community would pay the following fee for an MPI- administered contract.**



**Fig. 13** MPI fees

most to gain in economies of scale. However, in this example, smaller communities are more willing to contribute a fee for MPI services, while medium-to-large-sized communities are less willing to contribute staff resources (Fig. 12).

**Fee Amount**

When asked what kind of fee they would be willing to pay, communities that generally responded as neutral in the previous question now indicated that no fee was acceptable. Thirteen communities responded that they would not pay any fee, with seven communities responding they would pay some fee. Of the communities that responded positively, three stated they would pay a half percent fee, three responded that they would pay a 1% fee, and one stated it would consider paying a 3% fee.

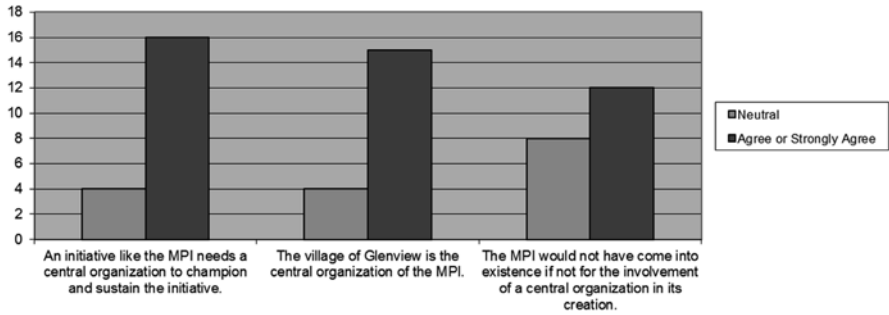


Fig. 14 Central organization

### Central Organization

Communities were asked to consider the following questions:

- An initiative like the MPI needs a central organization to champion and sustain the initiative.
- The village of Glenview is the central organization of the MPI.
- The MPI would not have come into existence if not for the involvement of a central organization in its creation.

There is general agreement that something like the MPI needs a central organization, that Glenview is that central organization, and that if not for that central organization (Glenview), the MPI would not have come into existence (Fig. 14).

### The Importance of Voluntary Participation

Communities feel very favorable about the voluntary nature of MPI participation, with 19 or 20 communities agreeing and one disagreeing. Many communities appreciate being able to pick which services to participate in based on their preferences, and the MPI contract’s ability to realize cost savings for them. Some larger community administrators say that as long as the contract is at least the same price that they otherwise would have paid going into the contract as a single community, they choose to purchase with the MPI in order to benefit other communities, who may benefit from the increased economies of scale.

### Research Questions Answered

#### What Were the Intergovernmental Dynamics that Lead to the MPI?

The structure of the MPI is a response to the intergovernmental dynamics in the northern Illinois area. Previous experience with pooled purchasing for contractor-

provided road services primed communities to be more comfortable with the practice. Communities in the area are also closely knit by the connections formed through membership of various overlapping councils of government, planning agencies, purchasing groups, and informal partnerships.

### **How Has the MPI Adapted Since Its Inception?**

Hypothesis 2: MPI service contract sizes will change the number and configuration of communities involved in each service in an attempt to find the ideal size for cost savings.

Since its inception in 2011, the MPI has changed dramatically in scope and size. Beginning with 20 communities and nine services in 2011, the MPI offers 23 services to 29 communities. Group sizes for individual services have also adapted during the 3 years. Some services have increased the number of communities participating in a single contract each year, such as crack sealing, while others have decreased the average number of communities per individual contract, such as concrete work. Lead contract administrators from each community work together each year to find the right size for each contract, attempting to strike a balance between size and specifications. Some services benefit from smaller contract sizes in order to decrease contractor mobilization costs. Other services benefit from dividing groups into fiscal year calendar, county, and funding source.

### **Are There Lessons To Be Learned from the MPI's Experience?**

With many models for pooled purchasing in local government, communities should consider the pros and cons of a municipality-run program and compare them to alternative models. The MPI is a product of a single community that determined it had the capacity to create the MPI and did not want to wait for another organization to take on the task. While a municipality may have more administrative capacity for complicated engineering-related contract administration, a COG may be more regionally focused and less apt to leave peripheral communities out of discussions. Private contractors are at the center of the job-order contracting pooled purchasing model, but public organizations must consider the conflict between public and private values when contracting exclusively with private organizations for pooled purchasing.

## ***Discussion***

The variety of intergovernmental joint purchasing formulations in the Northern Illinois area is considerable. The pooled purchasing collectives can be led by a municipality, a county, a COG, a private organization (the case of a Job-Order Contractor),

the state, or the federal government. Looking at Agranoff and McGuire's (2001, p. 671) four models of intergovernmental relations (top-down, donor-recipient, jurisdiction-based, and network), each form of pooled purchasing has characteristics of the models. With increased intergovernmental cooperation, horizontal links in the metaphorical picket-fence of IGR are emphasized, sometimes weakening the hold of the top-down model. As local governments increasingly act together to solve problems, relationships that used to be dominated by a central player, typically the state or federal government, will change from top-down to the more shared relationships characterized by donor-recipient, jurisdiction-based.

One of the impacts of the MPI in the region, not just within the MPI community area but the Northern Illinois area as a whole (and arguably the nation), has been to foster discussion, debate, and in some instances, variations of the MPI. A western Cook County group of communities, including Western Springs and Riverside have based their initiative heavily on the MPI, albeit without one central community doing a majority of the work in the first year. The Western Cook County initiative is possible in part because the MPI has provided a useful model, with publicly-available legal documents with their jointly-bid boilerplate, cost-savings estimates, and technical advice to those communities with questions about the mixed-purchasing process. A similar effort is beginning in DuPage County, with a group of communities forming a team to evaluate joint purchasing for commonly-outsourced services. The services are the same as the MPI in its early years, and common bid specification ideas are being borrowed from the MPI's agreements. Administrators in western Cook County have likened the MPI's impact on their process to not needing to reinvent the wheel. MPI documents already show a framework on which to base a mixed-purchasing program.

## **Recommendations**

Based on findings and discussion of this paper, a checklist for creating a program similar to the MPI would include the following:

### ***Examine Your Community and Region's History with Pooled Purchasing***

Begin with an examination of previous joint-purchasing experiences. Ask which kind of organization was in control: the state, a COG, the county, a municipality, and consider the impacts that each central-party category has had on the performance of the joint-purchasing program. Many communities in the MPI participated in joint purchasing before the MPI (this reason was the top choice for why communities participated in the MPI). Glenview administrators preferred to create a municipality-centric program because they perceived that municipalities typically

have more administrative capacity than COGs to take on the arduous task of finding compromise on bid specifications. However, with the help of municipalities in its area, the Lake County Municipal League (LCML) was able to effectively jointly purchase for three road-related services in 2013. LCML has a full-time staff of one, but if the joint-purchasing program should expand, the director has said she would consider bringing on staff to help administer the program. It is also interesting to note that in 2013, the MPI considered bidding thermoplastic road-stripping services through the Northwest Municipal Conference's Suburban Purchasing Cooperative. This option did not come to pass, but it demonstrates an interesting possibility for purchasing cooperatives to work collaboratively to offer the best prices for communities.

Each configuration has benefits and potential drawbacks. There are also trade-offs involved. While a COG may have less capacity and staff typically, COGs are by nature more regionally focused. While a central municipality may focus more locally, they exist to serve their residents. However, a question raised in public administration research is whether local governments exist only to serve *their* residents. There are many questions as to what obligations local governments have to other local governments and their residents, regionally, nationally, and internationally. Different communities have different attitudes. Thurmaier and Wood (Thurmaier and Wood 2002, p. 595) write of the sentiment among communities in the Kansas City area, concerning interlocal agreements and joint purchasing (ILA):

Several of the largest jurisdictions view the system as a way to help smaller neighboring jurisdictions save costs by letting them piggyback on their large contracts. This speaks to a metropolitan culture of cooperation, repeatedly expressed by a wide range of actors across the jurisdictions.

### ***Consider the Impetus***

The second-most important reason communities chose to partner with the MPI was the financial crisis. As Westley and Vredenburg (1991) suggest, communities are more likely to collaborate when they are in fiscal distress. In tumultuous situations, entrepreneurial administrators look outside of their organization for solutions to problems (Hendrick 2011). This is to suggest that the MPI's creation may be described, at least partly, as a response to the financial crisis. It would be challenging to determine to what extent a similar program would have come into being if not for the financial crisis, but the answer to "Why did my community choose to partner with the MPI" was *firstly* "previous experience" and *secondly* "the financial crisis." It is possible to consider that a program such as the MPI would have come into being regardless of the crisis. "Professional associations encouraging pooled purchasing" is also the most-likely second choice for partnering with the MPI. As has been discussed, the financial crisis is only one of many factors impacting Northern Illinois communities' fiscal condition, so one cannot discount the changing nature of tax sources and intergovernmental aid (or lack thereof) when considering all the



motivations for partnering. Hendrick (2011) also notes that communities are most likely to collaborate at the stretching phase of fiscal distress, not when they are near the breaking point of financial collapse. Glenview was in self-described moderate fiscal shape coming out of the recession. Glenview administrators looked for communities similarly stretching their dollars but not on the verge of financial collapse for initial MPI partners.

### ***Report Intergovernmental Activities***

Stephens and Wikstrom (2007, p. 273) suggest all communities should have an individual within their organization who is aware of and involved in all intergovernmental relations and that all the intergovernmental activities should be shared with the regional planning authority. If communities are considering ILAs, they would benefit from having as complete a catalogue of regional IGR efforts as possible. There is much sharing of joint-purchasing knowledge among Northern Illinois communities, but much of it is informal and not centralized. For instance, the MPI does not have a publicly-available website for those interested in examining boilerplate or bid specifications, but Glenview staff has been obliging to organizations that contact them for that purpose, and the MPI does have a shared DropBox account for all presentations, contracts, and bid specifications.

### ***Cost Savings Calculations***

If the MPI is to be touted as a model for intergovernmental joint contracting (as ICMA has done by awarding it the Community Partnership Award Winner for 2012), communities individually and as a whole should thoroughly assess cost savings, not related solely to unit prices but also contract administration costs. As practiced by the Kansas City joint purchasing arm of the regional COG, the KCRPC, fees for the joint purchasing program are justified by calculating the average cost of bid advertisement, issuing purchase orders, and other aspects of the procurement process that are largely avoided by joint purchasing. If MPI communities were interested in monitoring their administrative cost savings, they should consider doing the KCRPC's analysis. As recommended by Ammons (2008), activity-based costing may allow communities individually to determine how much staff time goes into bid creation, advertisement, and awarding. However, calculating the cost of these activities is not enough to determine cost savings because with staff-time efficiencies, the organization will not realize actual cost savings unless positions are eliminated or freed-up time is used for more value-added activities. Also, when communities go directly from in-house service provision to MPI-related service provision, there should be some form of calculation to determine the significant amount of administrative time and effort avoided by tapping into pooled experience of the MPI communities. By calculating these administrative cost savings,

administrators may be able to make stronger arguments for participating with the MPI even if unit costs are similar or only slightly lower.

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## References

- Agranoff, R., & McGuire, M. (2001). American Federalism and the search for models of management. *Public Administration Review*, 61(6), 671–681.
- Ammons, D. N. (2008). *Tools for decision making: A practical guide for local government*. Thousands Oak: Sage Publications.
- Chicago Metropolitan Planning Commission Staff. (2011). Shifts in population and household income in metropolitan Chicago. [www.cmap.illinois.gov/about/updates/-/asset\\_publisher/UI-MfSLnFfMB6/content/shifts-in-population-and-household-income-in-metropolitan-chicago](http://www.cmap.illinois.gov/about/updates/-/asset_publisher/UI-MfSLnFfMB6/content/shifts-in-population-and-household-income-in-metropolitan-chicago). Accessed 10 Sept 2013.
- Hendrick, R. M. (2011). *Managing the fiscal metropolis: The financial policies, practices, and health of suburban municipalities*. Washington, DC: Georgetown University Press.
- Illinois Department of Transportation. (2013). Price indices. <http://www.dot.state.il.us/desenv/as-phaltpi.html>. Accessed 15 Sept 2013.
- Stephens, G.R., & Wikstrom, N. (2007). *American intergovernmental relations: A fragmented federal polity*. New York: Oxford University Press.
- Thurmaier, K., & Wood, C. (2002). Interlocal agreements as overlapping social networks: Picket-Fence regionalism in metropolitan Kansas city. *Public Administration Review*, 62(5), 585–598.
- U.S. Census Bureau. (2010). Census. <http://www.census.gov/2010census/>. Accessed 10 July 2013.
- Warner, M.E., & Hefetz, A. (2008). Managing markets for public service: The role of mixed public-private delivery of city services. *Public Administration Review*, 68(1), 155–166.
- Westley, F., & Vredenburg, H. (1991). Strategic bridging: The collaboration between environmentalists and business in the marketing of green products. *The Journal of Applied Behavioral Science*, 27(1), 65–90.

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