HARVARD Kennedy School
ASH CENTER
for Democratic Governance and Innovation

Field Scan on

Structuring a Waste Management and Recycling Organization

Provided to the City of Houston

Mayors Challenge Research Partner Services

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The purpose of this document is to provide reference material and case studies for the City of Houston's *One Bin For All* project. Specifically, this document will assist the city as it considers the implications and challenges of choosing a specific structure for the project.

I. Structuring a Waste Management and Recycling Organization - Motivation

Since the 1990s, there has been significant consolidation within the waste management field. This consolidation was primarily motivated by stricter EPA regulations that increased the cost of managing a facility. As a result, Texas reduced its number of landfills from over 1,000 in the early 1990s to approximately 100 today. In response to this changing landscape, many cities and counties have moved toward regional private sector waste management operators or created regional government partnerships, often in the form of a local government corporation, to reduce costs and gain economies of scale. The landscape for recycling is not much different, as many waste management organizations also operate regional recycling centers as part of a private sector entity or local government corporation.

As the City of Houston considers how to structure its waste management and recycling organization as part of the *One Bin For All* project, it is worth exploring historical lessons learned. The transition from managing waste and recycling via a city's general fund or enterprise fund to a regional partnership structured as a local government corporation has many implications, and there are lessons to be learned from other cities and counties across the United States. This field scan will highlight the key legal and management implications of switching to a local government corporation, as identified from academic articles and technical resources, and will examine key lessons from the prior experiences of other cities.

II. Waste Management and Recycling Organizations: Terminology and Overview

There are three primary options for structuring a city's waste management operations: city general fund, enterprise fund, and a local government corporation. The majority of this document focuses on the comparative analysis of a local government corporation structure to the other options. Therefore, it is useful to have an overview of each.

When cities choose to manage waste management and recycling from their general fund, the revenues and costs of the operations are managed identically to other city operations. The city also maintains legal liability for the waste management and recycling operations.

When cities choose to manage waste management and recycling through an enterprise fund, then the revenues and costs are isolated and identified as specific to that operation. This option therefore increases financial accountability of the operation. Enterprise funds are self-sustaining and typically supported by user fees for the services provided.[i] The city still maintains legal liability for the operations. The reference document, *Enterprise Funds for Solid Waste Management,* listed in resources section, provides a thorough analysis of enterprise funds in this area.

The term local government corporation refers to a broader set of quasi-public entities. These organizations are a separate legal entity from the municipality, with separate governance, operations, and finances. As the City of Houston continues to examine best practices of using this structure, it would be wise to understand the wide variety of terminology and uses of similarly structured organizations.

Aside from the term local government corporation, there are four other common terms used to refer to similar entities: government authorities, quasi-public agencies, government-owned corporations, and state-owned enterprises. The terms appear to be mostly tied to geographic areas. For example, the state of New York has 1,176 government authorities, of which 324 were created by the state and 844 by local governments, [ii] whereas Massachusetts has 42 quasi-public agencies that operate on the state or regional level. [iii] Both of these states use their specific term when referring to waste management and recycling organizations at the state and local levels. Each state and particular organization has slight differences in the legal and management structures used to fund and operate the entity, including whether or not the government maintains oversight, which highlights the flexibility associated with using a corporation structure.

The four case studies used within this document come from four different states – North Carolina, Pennsylvania, Texas, and Virginia. Each uses the term "authority" in their title, but is built upon the specific state legal definition – such as local government corporation in Texas. Therefore, when considering lessons learned across the waste management industry, it is advisable to consider all entities that fall under the broader definition and terminology.

III. Local Government Corporations (LGC): Legal and Management Implications

When making the transition to a local government corporation, there are many benefits and challenges worth considering. Specifically, as Houston begins the process of engaging with private sector organizations, potential partner cities and counties, and internal stakeholders, there should be a clear articulation of how an LGC structure could benefit the city, what steps are being taken to ensure these benefits will be captured, and how challenges will be mitigated. The implications worth considering fit into two primary categories: legal and management.

Please note that the information contained herein does not constitute legal advice. For a detailed legal opinion, a lawyer barred in the state of Texas should be consulted.

Legal Implications

Limit Legal Liability[iv] – Many municipalities consider establishing a local government corporation because it can protect the municipality from lawsuits or other claims against the corporation. While this is true, there are also circumstances that could result in municipal liability. Some of the primary considerations include:

- If the municipality exhibits direct control over the local government corporation and its services, then it may not be immune from liability in some circumstances; and
- During the incorporation and contracting process, any missteps may provide legal risk associated with liability and control of the corporation.

Protect Electorate from Financial Risk[v] – In a situation where the municipality would like to capitalize on new and potentially risky technologies, such as *One Bin For All,* a local government corporation can limit financial risk to the municipality. As highlighted in the "Limit Legal Liability" section above, there are circumstances where the protections provided by a corporation will fail to limit exposure. Some of the primary considerations include:

- A municipality may use a local government corporation to assist in financing the project by issuing bonds or notes to pay for project costs and subsequently leasing or selling the ownership interest;
- If the entity will need to borrow or acquire assets, a local government corporation will not be limited by the municipalities' borrowing rules and limitations; and
- If a municipality is unlikely to sell or divest the enterprise in the future, then it may be preferable to operate the enterprise directly or through a partnership agreement with other municipalities.

Management Implications

Share Control with Economies of Scale (Partnerships)[vi] – By joining together with other municipalities to serve a wider geographic area, such a facility can increase its utilization and take advantage of economies of scale. Some of the primary considerations of partnerships include:

- The relative investment of two or more municipalities in the enterprise can be reflected in the ownership stake;
- Municipalities are often hesitant to participate as a customer in a facility owned solely by another municipality and want to have their voice in the pricing and ownership decisions for fear of political and economic risk. For example, the TASWA facility in Texas, detailed in a subsequent case study, used a LGC structure because it allowed each municipality to share control;
- Advances should be secured from partners to ensure that proposed investments will materialize; and
- A clear dispute resolution mechanism should be specified when numerous partners are involved and invested in the corporation.

Engage External Expertise and Unburden City Council[vii] – A separate corporation and Board of Directors can allow city council members to focus on other municipal issues, freeing them of primary oversight responsibility. Additionally, a corporate board can facilitate engagement with special expertise in the field. Some of the primary considerations include:

- Board appointments will require a clear set of guidelines to prevent conflicts of interest and establish possible oversight by council, including an assessment of how appointments are perceived by public, media, and taxpayer groups;
- If a significant amount of municipal assets will be transferred, or there is concern about municipal control, then council or city leadership should be considered for the board; and
- Determine who will sign as the shareholder on the municipality's behalf, as significant decisions will still go before the council.

Use an Operating Model Distinct From a Municipal Department[viii] **–** Similar to an enterprise fund, a corporation can provide financial management that is distinct from the municipality. Distinct financial management can allow for improved full cost determination and disclosure because all costs are accounted for separately. Full cost determination allows for transparency and accuracy in determining any necessary user fees.[ix] Some of the primary considerations include:

- Independent financial management and user fees require additional resources to administer, as opposed to the general fund;
- User fees are not tax deductible to the resident, while property taxes often can be; and
- Establishing a separate organization and fine-tuning fees and controlling program costs can take several years.

Transparency and Disclosure – Corporations, especially those with private partners, are often exempt from many forms of public oversight and disclosure. In fact, many private partners have successfully prevented the release of financial information, even when project overruns occur.[x] Proper governance and contracting regulations can be used to mitigate potential obstacles arising from a lack of transparency. Some of the primary considerations include:

- Data collection can be a challenge since reporting methods and data standards are often different between the corporation and the local government; and
- Citizens and advocacy groups often raise significant concerns about a lack of transparency among quasi-public agencies and corporations if data is not accessible.[xi]

By considering and mitigating the legal implications associated with *One Bin For All* through an effective governance and contracting process, the City of Houston can reduce risk and prevent failure. As described in detail in the following section, the New Hanover County, North Carolina and Harrisburg, Pennsylvania case studies highlight how innovation in waste management is risky and may bring cities close to bankruptcy when improperly handled.

Additionally, the management implications emphasize potentially great benefits, but require intelligent preparation to prevent corruption and inaccessibility. The case studies of Texoma Area Solid Waste Authority (TASWA) and Central VA Waste Management Authority (CVWMA) provide examples of successful partnerships and governance structures in regional waste management corporations.

IV. Transitioning to an LGC: Examples in Waste Management and Recycling

While several cities and counties have made the choice to transition waste management and recycling from a general fund/enterprise fund to a local government corporation/authority over the last two decades, very few case studies showcase transferrable key lessons for success. Additionally, there are very few case studies that uncover risks in the process or key mistakes. Through extensive research and interviews with senior leaders, four case studies were developed in an attempt to help the City of Houston adequately prepare for and avoid major obstacles.

New Hanover County, NC Waste Management – Financial Risk

In 2010, New Hanover County, North Carolina contracted with R3 Environmental hoping to revolutionize solid waste.[xii] R3 had proposed an innovative plan that promised residents could throw all waste into one bin, which would be transported to a single processing facility. The company guaranteed it would divert at least 80 percent of waste from the landfill. Many applauded the county commissioners and staff for embracing such an innovative solution to waste management,[xiii] but by the following year, the county was forced to terminate the contract with R3 due to a deficiency of necessary funding.[xiv] As Houston faces a similar decision of choosing a private sector partner who contracts with the LGC, this case offers three lessons regarding the financial risks:

1) **The private partner should bear financial risk.** When the contract was terminated, R3 forfeited a performance bond, which recouped the primary costs of the contracting process. The challenge is finding the right risk balance between the partner and city to ensure external investors will be willing to invest.
2) **Multiple risks should be heeded as red flags.** R3 was recently established with no track record of raising capital. It was also proposing to use new technology, which makes choosing a partner with financial assets and a proven track record more important.
3) **Consultants and agreements can provide a false sense of security.** The county had hired a solid waste consultant to recommend a company to replace the existing entity, and his recommendation was accepted without further scrutiny. R3 also hired top consultants to advise the company and to build their equipment, but neither the consultants nor their contractual obligations provided the necessary support for R3 to secure funding.

If the City of Houston uses an LGC structure versus a general or enterprise fund, then financial risk to the city is limited, but this increases financial risk to the LGC and partners. This tradeoff is often desired, but requires further diligence to find a partner with the financial assets and proven record of raising capital to ensure successful project launch and the ability to withstand setbacks. The alternative is for the city to provide the financial guarantee.

Harrisburg, PA Resource Recovery Facility – Project Management Risk

In 2004, the Harrisburg Authority – a public entity charged with providing solid waste management services and whose Board was handpicked by the mayor – awarded a contract to Barlow Projects, Inc. to retrofit two incinerators and build a third unit. Barlow had developed a patented technology that minimized breakdown risk and implemented innovative pollution controls for the incinerator units. The City of Harrisburg guaranteed $120 million in bonds for the project, but by 2007, the city fired Barlow Projects and by 2010, the city owed more than $280 million on the project.[xv] This case provides four key lessons regarding the risks associated with a significant infrastructure project, similar to the project and risks the LGC and Houston will undertake:

1) **Hiring an independent project manager can ensure that contractors perform their work correctly**. In this case, Barlow Projects acted as its own project manager. From the beginning, the company struggled to oversee subcontractors and manage a project larger in scale than it

had ever done before. Firms that have proven track records of managing large-scale infrastructure projects can add a layer of independence and experience needed to identify major obstacles early and manage effectively.

2) **Fines for failing to meet deadlines are useful, but not foolproof**. The contract with Barlow had a provision that allowed Harrisburg to fine them for missing deadlines. However, the city did not anticipate that Barlow would become too financially unstable to pay the fines.
3) **Withholding retainage fees until completion is wise, but not enough**. The contract also included a provision to withhold $7 million until completion, but the city released it back to Barlow in a desperate, last-ditch effort to help them complete the project.
4) **The most important provision is to insist on a performance bond**. Barlow did not qualify to be bonded, but rather than terminating the relationship, city officials and the authority created a legal workaround. Therefore, no bank or insurance company had guaranteed the bond limit when the company defaulted.

By using an LGC structure, the City of Houston can limit the legal and financial liability of a large-scale infrastructure project, like the one in Harrisburg (refer to Section III). However, the city will still bear risk in the form of service and environmental standards if a project fails. An LGC structure can also engage external expertise and unburden the city council (see Section III). In the Harrisburg case, the city council allowed some of the most significant mistakes in the process, such as no performance bond, and external expertise would likely have solved many of the contracting flaws.

Texoma Area Solid Waste Authority (TASWA) – Process and Partnerships

In 1995, the cities of Denison, Gainesville, and Sherman, Texas held discussions to determine if there was interest in permitting and operating a shared solid waste recycling and disposal facility. Over the course of ten years, the partnering cities went through a lengthy process to ensure the project met the necessary technical and legal requirements. In 2005, the facility, called Texoma Area Solid Waste Authority (TASWA), was finally opened.[xvi] In an interview with Dale Sissney, the Executive Director of TASWA, one primary lesson emerged that will help the City of Houston to consider the project process and partners.

1) **Partnerships often dictate a corporate structure because of control concerns.** None of the cities within the partnership wanted sole responsibility for the liabilities of all the other cities, and none of the cities wanted any other city to be in complete control.

Within Texas, the LGC structure has proven to be valuable for municipalities who wish to partner on waste management and recycling. This structure, versus a general fund or enterprise fund, allows for shared risk and control. In the case of TASWA and other municipalities who have chosen the LGC structure, no one municipality wanted to bear all of the financial risk or give up complete control. An LGC allows municipalities to bear the risk and maintain control in proportion to their investment.

Central Virginia Waste Management Authority (CVWMA) – Governance

In late 1989, a city councilor from Richmond, Virginia advocated for and led the process of creating a regional waste management authority for 13 surrounding localities. By late 1990, the Central Virginia Waste Management Authority (CVWMA) had been established. After two years, the authority had finally completed all the necessary administrative and governance hurdles to fully operate. Because the authority had outsourced all operations to the private sector, no facility needed to be constructed or landfill developed. The main challenge the group initially faced was developing an effective governance system and then gaining approval from all localities. In an interview, Kim Hynes, the Executive Director of CVWMA, highlighted two important lessons concerning project timeline and governance structures that apply to a Houston LGC:

1) **Governance of a multi-partner authority requires significant time and planning for initial approvals.** The process took around two years for CVWMA to develop the Board, articles of incorporation, and bylaws for the new authority. The process required gaining approval from the governing body of each locality, and if any locality renounces partnership, the process must be repeated.
2) **Flexibility allows for improved services, but can increase risk.** The authority provides a menu of services to each partner locality. For instance, one locality can choose to have a curbside recycling program, for which it will be charged an additional fee. While tailored to the needs of each partner, such flexibility also increases the financial risk to the authority during economic down cycles.

While a LGC can provide many advantages, it does present challenges. One challenge is the complexity of managing a multi-partner authority. CVWMA, which is comprised of 13 localities, required significant time to structure and gain the necessary approvals. In addition, changes to the authority can require consensus approval or choices by individual municipalities can increase overall risk. A general fund or enterprise fund provides a much simpler governance option.

Appendix I: Resources

Theory and Practice Literature

Eggers, Dolores. *Enterprise Funds for Solid Waste Management*. University of North Carolina, 1994.

Molinari, Jeffrey, and Charlie Tyer. "Local Government Enterprise Fund Activity: Trends and Implications." *Public Administration Quarterly* 27 (2003): 369–391.

Rogoff, Mark, and John Williams. *Approaches to Implementing Solid Waste Recycling Facilities*. Noyes Publications, 1994.

Municipal Use of Local Development Corporations and Other Private Entities. Division of Local Government and School Accountability, State of New York, 2011.

Organizations & Examples

Brazos Valley Solid Waste Management Agency - City of Bryan and College Station, TX, http://twinoakslandfill.com/

Texoma Area Solid Waste Authority - Cities of Denison, Gainesville, and Sherman, Texas and by Cooke and Grayson Counties, Texas, http://www.taswa.com/

Central Virginia Waste Management Authority - Richmond, VA, http://cvwma.com/

Lancaster County Solid Waste Management Authority - Lancaster, PA, http://www.lcswma.org/

Humboldt Waste Management Authority - Eureka, CA, http://www.hwma.net/

Technical Resources:

Launching and Maintaining a Local Government Corporation – A Guide For Local Officials 2006 http://www.cscd.gov.bc.ca/lgd/infra/library/Local_Government_Corporations_Guide.pdf

Fact Sheet on Local Government Corporations – City of El Paso, http://home.elpasotexas.gov/ballpark/documents/PB%20Comments%20II%20to%20FACT_SHEET%20-%20LGC.pdf

Applicability of Various Texas State Statutes to Local Government Corporations https://www.texasattorneygeneral.gov/opinions/opinions/49cornyn/op/2001/pdf/jc0335.pdf

Endnotes

[i] Dolores Eggers, *Enterprise Funds for Solid Waste Management* (University of North Carolina, 1994).

[ii] New York State Comptroller, *Public Authority Employees By the Numbers*, December 2013. Retrieved from: https://www.osc.state.ny.us/reports/pubauth/PA_employees_by_the_numbers_12_2013.pdf

[iii] Massachusetts Quasi-Public Corporation Planning Council, Annual Report Fiscal Year 2010. Retrieved from: http://www.mass.gov/hed/docs/eohed/fy10quasireport.pdf

[iv] *Launching and Maintaining a Local Government Corporation: A Guide for Local Officials* (British Columbia, Ministry of Community Services, 2006).

[v] Ibid.

[vi] Ibid.

[vii] Ibid.

[viii] Ibid.

[ix] Eggers, *Enterprise Funds for Solid Waste Management*.

[x] "Contractors, Quasi-Public Agencies Avoid Scrutiny, New Studies Show," accessed February 18, 2014, http://www.governing.com/blogs/by-the-numbers/contractors-quasi-public-agencies-conceal-public-records-with-less-transparency.html.

[xi] "Out of the Shadows, Mass. Quasi-public Agencies and the Need for Budget Transparency « New England First Amendment Center," accessed February 18, 2014, http://www.northeastern.edu/firstamendmentcenter/?p=167.

[xii] "FIRST ON 3 UPDATE: County Releases R3 from Garbage Contract; Will Cost Taxpayers More to Keep Current System in Place," accessed February 27, 2014, http://www.wwaytv3.com/2011/03/11/first-3-update-county-releases-r3-from-garbage-contract-will-cost-taxpayers-more-to-keep-.

[xiii] "R3 Environmental on Track to Change New Hanover County's Waste Operations," *StarNewsOnline.com*, accessed February 25, 2014, http://www.starnewsonline.com/article/20100519/ARTICLES/100519534.

[xiv] "New Hanover County and R3 Terminate Agreement," *StarNewsOnline.com*, accessed February 20, 2014, http://www.starnewsonline.com/article/20110311/ARTICLES/110319937.

[xv] "Harrisburg's Failed Infrastructure Project," accessed February 27, 2014, http://www.governing.com/topics/transportation-infrastructure/Harrisburgs-failed-infrastructure-project.html.

[xvi] "Texoma Area Solid Waste Authority (TASWA)," n.d., http://www.taswa.com/history.php.