MMA Fiscal Policy Committee

Best Practice Recommendation: Municipal Reserves

**BEST PRACTICE:** Adopt, as a set policy or practice, adequate funding of municipal reserve accounts to mitigate budget risks from extraordinary and unforeseen events and maintain fiscal stability over time. This could include the adoption of reserve funding targets of 5 percent or more, based on the size of the municipal budget and consideration of spending and revenues risks. This could also include the identification of specific year-end fund balances or revenues from other sources to contribute to reserve accounts. A good policy or practice could also include rules for the use or draw down of reserves and for replenishment of depleted accounts.

It is widely recognized that those state and local governments that have established and funded reserve and stabilization accounts at sufficient levels have been well-served, because reserves allow states and localities to sustain services in times of economic and fiscal distress and limit the risk from extraordinary and unforeseen occurrences. Sound policies and practices, along with adequate levels of reserves, can also have a positive impact on credit ratings and can reduce the cost of borrowing and capital project spending.

The Division of Local Services advises that a good reserve policy will establish target balances for the local stabilization fund and other reserves and "develop a schedule of annual appropriations … designed to reach and sustain target balances gradually over time."

A Best Practice adopted by the Government Finance Officers Association (GFOA) Executive Board recommends that "governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund." The GFOA suggests that the balance be maintained at no less than two months of general operating fund revenues or expenditures, although the amount of the balance and the measurement depend on the specific circumstances of the municipality. The GFOA also recommends that the purpose of various parts of the fund balance be specified, including, for example, "a portion for working capital, one for budgetary stabilization, and one for responding to extreme events."

References from the Government Finance Officers Association (GFOA):
www.gfoa.org/appropriate-level-unrestricted-fund-balance-general-fund
www.gfoa.org/adopting-financial-policies-0
MMA Fiscal Policy Committee

Best Practice Recommendation: Capital Planning

**BEST PRACTICE:** Develop and maintain a multi-year capital improvements program (CIP) that is integrated into the overall revenue and spending plan of the municipality. The plan could include an assessment of the state of repair of existing capital assets and the need for new ones, a capital debt policy and debt affordability analysis, a schedule for approval and funding of repair, renovation and new construction projects, and identification of sources of revenue and finance.

The Division of Local Services (DLS) has written a manual to help cities and towns develop and implement a CIP. The DLS writes that a good CIP can:
- Facilitate coordination between capital needs and the operating budgets
- Enhance a community's credit rating, control of its tax rate, and avoid sudden changes in debt service requirements
- Identify the most economical means of financing capital projects
- Increase opportunities for obtaining federal and state aid
- Relate public facilities to other public and private development and redevelopment policies and plans
- Focus attention on community objectives and fiscal capacity
- Keep the public informed regarding future needs and projects
- Coordinate the activities of neighboring and overlapping units of local government to reduce duplication
- Encourage careful planning and design to avoid costly mistakes and help a community reach desired goals

The Government Finance Officers Association (GFOA) recommends that “state and local governments prepare and adopt comprehensive multi-year capital plans to ensure effective management of capital assets.” A prudent multi-year capital plan identifies and prioritizes expected needs based on a community’s strategic plan, establishes project scope and cost, details estimated amounts of funding from various sources, and projects future operating and maintenance costs. The GFOA recommends that a capital plan “should cover a period of at least three years, preferably five or more.”

**Resources**

Massachusetts Division of Local Services:
- Developing a Capital Improvements Program, A Manual for Massachusetts Communities (1997)
  www.mass.gov/dor/docs/dls/publ/misc/cip.pdf
Government Finance Officers Association (GFOA):
• Asset Maintenance and Replacement (approved by GFOA's Executive Board, March 2010)
  www.gfoa.org/asset-maintenance-and-replacement
• Capital Planning Policies (approved by GFOA's Executive Board, September 2013)
  www.gfoa.org/capital-planning-policies
• Capital Project Monitoring and Reporting (approved by GFOA's Executive Board, October 2007)
  www.gfoa.org/capital-project-monitoring-and-reporting
• Multi-Year Capital Planning (approved by GFOA's Executive Board, February 2006)
  www.gfoa.org/multi-year-capital-planning
• Incorporating a Capital Project Budget in the Budget Process (approved by GFOA's Executive Board, January 2007)
  www.gfoa.org/incorporating-capital-project-budget-budget-process
• Determining the Estimated Useful Lives of Capital Assets (approved by GFOA's Executive Board, March 2007)
  www.gfoa.org/determining-estimated-useful-lives-capital-assets
MMA Fiscal Policy Committee

Best Practice Recommendation: Budgeting for Snow and Ice Removal

**BEST PRACTICE:** Adopt, as a policy or as part of the annual budget process, an experience-based target for snow and ice appropriations and a plan to cover extraordinary expenses for harsh winters. The target could be expressed as a multi-year average of actual expenses or as a percentage of an average that progresses toward the target over time. For extraordinary expenses, a portion of municipal reserves could be set aside and identified as available for this purpose.

Many cities and towns significantly underfund snow and ice removal accounts when adopting their municipal budgets, with the expectation that reserves will be available to cover unbudgeted expenses by year’s end or that a deficit can be carried forward to the next fiscal year. Weather- and storm-related costs are impossible to predict with any certainty, and local officials are understandably reluctant to allocate excessive amounts for snow and ice removal purposes at the expense of other municipal services. There are also disincentives in the deficit carry-forward law that make it difficult to fully fund snow and ice accounts.

Severely underfunded snow and ice accounts, however, carry a fiscal risk. In some years, reserves may not be sufficient to cover major unbudgeted expenses, and significant deficits carried over from previous years may reduce resources that otherwise would be available to fund other services.

In their original fiscal 2014 budgets, cities and towns appropriated $115 million for snow and ice spending. Actual spending totaled nearly $205 million, about $90 million more than originally budgeted, about 78 percent over budget. Of the 311 over-budget municipalities, 148 were over budget by more than 100 percent and 74 by more than 200 percent. One hundred and eleven cities and towns carried forward deficits totaling $39 million in fiscal 2014.

The best practice of adopting an experience-based target for snow and ice appropriations (with a plan to get there over time, if the gap is too large), with a policy on how to plan for and cover extraordinary expenses for harsh winters, would encourage cities and towns to review actual historical snow and ice spending when adopting a budget and to include a reasonable appropriation. This would help avoid unnecessary withdrawals from local reserve accounts and the carry forward of significant deficits into future years.
MMA Policy Committee on Personnel and Labor Relations

Best Practice Recommendation: Managing Other Post-Employment Benefit (OPEB) Liabilities

BEST PRACTICE: Take necessary steps to modernize benefit structures and implement pre-funding options to effectively mitigate and manage Other Post-Employment Benefit (OPEB) liabilities. This includes using the authority that localities have under state law to change retiree health plan contribution ratios and plan design elements, and investing funds in a reserve account to pre-fund the OPEB liability for current and future retirees.

Cities and towns face a $30 billion liability for their Other Post-Employment Benefits. Under current law, eligibility for benefits is quite generous. In most cases, employees qualify for health insurance for themselves and their dependents for life if they work as few as 20 hours per week for 10 years and are 55 years of age. Access to this level of retiree health benefit has left cities and towns with a liability far larger than their pension liability, with bond rating agencies and the federal government taking notice.

In the absence of statewide legislation, there are several actions that cities and towns can take to manage their OPEB liability. It is important to regularly review and consider a wide range of options to make changes to health insurance as an opportunity to manage OPEB costs. Cities and towns should be creative, and consider measures such as increasing new hire contribution rates, making meaningful plan design changes, and engaging in conversations with active employees about setting money aside to fund their future benefits.

Similarly, under state law (recently affirmed by a Supreme Judicial Court decision), cities and towns may change the contribution rate for retired employees without engaging in collective bargaining. If municipal retirees are paying less than 50 percent of the premium, or have the same or lower contribution rates as active employees, it may be worth considering a change.

On the funding side, there are a handful of steps municipalities can take to begin funding their liability. In order to have all of the information and have all parties be on the same page, it is first important to conduct the required actuarial analysis every two years, as well as to have an agreed-upon reserve or financial policy.

Once the size of the liability is agreed upon, municipalities should consider funding their normal costs each year. Cities and towns are encouraged to use savings from changes in health insurance, such as using Municipal Health Insurance Reform, to fund their Annual Retired Contribution (ARC). This would at least fund OPEB obligations from this point
forward at their annual cost. Additionally, cities and towns are encouraged to begin to pay the normal cost for new employees immediately from the date they are hired. If financially feasible, this could eventually be expanded to existing employees.

Finally, it is a best practice recommendation that communities establish an irrevocable trust through Chapter 32B, Section 20 of the Massachusetts General Laws, and use a meaningful and recurring revenue stream to fund the trust (such as a portion of the local-option meals tax, local-option lodging tax, or other local revenue source). Communities are encouraged to use an irrevocable trust rather than a stabilization fund. This ensures the money is earmarked for OPEB and is segregated from other municipal responsibilities. Similarly, it is worth weighing the pros and cons of managing the funds locally or investing through the State Retiree Benefits Trust Fund (SRBTF), an option now available to municipalities.

These best practices will allow cities and towns to manage the costs of retiree benefits and begin to pre-fund their OPEB liabilities.

**Resources**

State Retiree Benefits Trust Fund (Frequently Asked Questions)
[www.mass.gov/srbtf/docs/srbtf/srbtf-faq.doc](http://www.mass.gov/srbtf/docs/srbtf/srbtf-faq.doc)

Government Finance Officers Association (OPEB Best Practice)
[www.gfoa.org/sites/default/files/CORBA_ENSURING_OPEB_SUSTAINABILITY.pdf](http://www.gfoa.org/sites/default/files/CORBA_ENSURING_OPEB_SUSTAINABILITY.pdf)
MMA Policy Committee on Personnel and Labor Relations

Best Practice Recommendation: Adequate Preparation for Collective Bargaining Cases Referred to the Joint Labor-Management Committee

**BEST PRACTICE:** Engage in collective bargaining using a comprehensive approach that recognizes the possibility that police and fire negotiations may be referred to the Joint Labor-Management Committee (JLMC). This includes setting a pattern with all bargaining units, costing out the total package, establishing comparable communities, and having an agreed-upon financial policy.

The Joint Labor-Management Committee (JLMC) is designed to mediate collective bargaining disputes and impasses between municipalities and their police and fire unions. When the JLMC takes jurisdiction over a matter, the parties are assigned a labor representative, management representative, and a neutral mediator.

Preparation is the key to a successful outcome at the JLMC. It is essential to set a uniform pattern with other municipal and school bargaining units to establish common expectations, and well-documented intra-community comparables for negotiations with your police and fire unions, and it is important to have this framework in place before the JLMC becomes a possibility.

It is also important to cost out the total package on the table. Seemingly non-monetary items, such as additional vacation days or shift swapping, will cost cities and towns money in the way of overtime. It is important to understand the cost of every aspect of the proposals submitted by municipalities and labor.

As part of the preparation, it is important for municipalities to identify a reasonable list of comparable communities. Having a set of comparable communities gives municipalities vital information and adds credibility when cases are heard before the JLMC. If labor seeks to promote a different set of comparable communities, it is important to know this and to analyze the impact this would have. Ideally, municipalities should work early on with labor to agree on a common list of comparable cities or towns.

The JLMC uses peer mediators as part of the negotiation process. Municipal officials should work with their JLMC management peers as they assist them throughout the JLMC process.

When working with labor unions, it is critical for management to know and work with the labor unit representatives on the other side of the table who are interested in constructive negotiations. These individuals are long-time municipal
employees, and it benefits all parties when management can work collaboratively with reasonable people within the labor union to reach agreement.

Finally, it is vitally important for municipalities to adopt formal reserve and financial policies that identify the specific uses of reserve funds, stabilization accounts, capital funds and other one-time or recurring revenue sources. These policies will ensure that the financial goals of the community are clearly documented, so monies that have been set aside to deal with unforeseen emergencies, economic downturns, capital projects, OPEB liabilities, and other uses can be protected during the negotiation process.

These best practices will allow municipal officials to effectively negotiate on behalf of local citizens and taxpayers, and provide greater chance of success before the Joint Labor-Management Committee.
MMA Policy Committee on Personnel and Labor Relations

Best Practice Recommendation: Managing Unemployment Insurance Claims and Costs

BEST PRACTICE: Develop and implement a comprehensive set of steps to manage Unemployment Insurance (UI) claims and costs. This includes timely response to the Department of Unemployment Assistance when a claim is filed, identifying a UI point person in the municipality, working with the school department to understand all of the community’s cost exposures, and including mitigating language in collective bargaining agreements.

Cities and towns face several unique challenges when managing their Unemployment Insurance (UI) costs. Most municipalities are reimbursable (as opposed to contributory), meaning they pay dollar-for-dollar for UI claims instead of paying into an insurance pool like most of the private sector. This can cause significant financial difficulty for a city or town when a claimant unjustifiably receives benefits. Additionally, municipalities have a large number of part-time and seasonal employees, particularly in school departments, which adds to the complexity.

There are several strategies cities and towns can implement to manage their UI costs. It is recommended that municipalities have a point person to manage UI and/or a point person assigned to work with their Third-Party Administrator (TPA). It isn’t always clear who “owns” the management of UI claims in a community, and it varies from one municipality to the next. Additionally, many communities use a TPA. It is important that one person have ownership of managing and reviewing all UI claims, and that if a municipality is using a TPA there is a dedicated internal staff person in regular communication with that firm.

It is also important to have a clear partnership with the school department. Many of the part-time employees that generate UI claims are school employees. It is absolutely critical for the municipal point person to have a clear line of communication and understanding with the school department.

Municipalities are urged to always respond to the Department of Unemployment Assistance’s notice of a claim, and, if possible, attend the hearing. According to the DUA, the employer does not respond to the DUA approximately 50 percent of the time when a claim is filed. It is critical that hearing officers understand the employer’s side of the situation. Additionally, municipalities are encouraged to submit as many documents as possible with the employer questionnaire.

Lastly, municipalities are encouraged to include language in collective bargaining agreements to mitigate claims, and to exercise options to reduce exposure. This includes making it clear up front that seasonal and part-time employees are not eligible for UI, and, if feasible and affordable, assigning seasonal workers to other departments or functions during
the year. It is also important to provide timely notification to school department employees (such as school bus drivers, cafeteria workers and crossing guards) before holiday weeks and summer vacation that there is a "reasonable assurance" they will be back to work after the breaks, which avoids the possibility of these part-time employees filing for UI benefits during the December, February, April and summer vacations. (Currently, the reasonable assurance protection is only applicable to school employees funded through the school budget, and is not available for these school-based employees if they are funded through the municipal side of the budget.) It is also important to use the DUA's seasonal certification for seasonal employees.

These best practices offer several key approaches that can mitigate the cost of Unemployment Insurance claims for cities, towns and local taxpayers.
MMA Policy Committee on Public Works, Transportation and Public Utilities
Best Practice Recommendation: Pavement Management System Planning

BEST PRACTICE: Adopt a pavement management plan to guide investment on local roads with the goal of maintaining municipal streets in a state of good repair.

Pavement management systems (PMS) involve planning for pavement management and rehabilitation with the goal of maximizing the value and life of a pavement network. The benefits of implementing a pavement preservation system may not be immediate and dramatic, but accrue substantially over time. Roads that generally are in good condition do not register a major change in condition rating after a treatment is applied – the rating continues as good. What is important, however, is the condition rating several years later. Roads that receive regular preservation treatments are in better condition than those left without treatments, and are less costly to maintain over the long term. When streets are maintained regularly, cities and towns can see the return on their investment. When roadways are not adequately maintained, however, they deteriorate much more quickly and cost dramatically more because roads that fall into a state of disrepair must be completely rebuilt at a much higher cost.

One example of the benefits of having a pavement management plan is when real-time repairs are made when cracks develop on a road surface. A pavement management plan applies the effective use of infrared technology to recognize those cracks and efficiently seal them for little cost. Without a plan, the road that seems in good condition and is not
repaired will quickly deteriorate once water infiltrates those cracks. (In cold weather the water freezes, creating frost heaves, which undermine the road and cause potholes and substantial damage.) Once water has been allowed to infiltrate a roadway with a cracked surface it becomes much more costly to repair.

A comprehensive pavement management system involves rating sections of every road in a community – from poor to deficient to fair to good to excellent. The plan identifies the poor, deficient and fair roads in most need of repair, as well as those that are in good or excellent condition, and develops a schedule and construction plan to increase the overall quality of the roads to an acceptable level. Interestingly, small investments in good or excellent roads are wise decisions, as these repairs will avoid more costly repairs in the short-, medium- and long-term.

A robust pavement system will develop a schedule to repair poor roads and balance these investments with efforts to prevent other roadways from falling into more costly categories. In addition, the overall PMS plan will enable cities and towns to explain the investment and repair strategy to residents. The goal of a pavement management system is to improve the road quality up to good or excellent, based on a five- or 10-year investment strategy. Sound PMS plans recognize the usage of the road, map out the current conditions of roads in the community, and develop a timeline for repairs or maintenance to each segment in the system. PMS plans also identify funding sources, primarily Chapter 90 funds or local revenues, and a schedule for maximizing the use of these funds, based on the return on investment and overall need.

There are a number of off-the-shelf PMS software programs that can assist highway and public works departments in developing custom PMS plans for each municipality, and many consulting firms that offer similar services. Cities and towns are encouraged to research the most cost-effective way of developing and implementing a PMS plan for their community.

**Resources**

Federal Highway Administration Asset Management Division  
www.fhwa.dot.gov/asset  
FHA Pavement Management Primer  

Related National Organizations:  
American Association of State Highway and Transportation Officials (AASHTO)  
www.transportation.org  
American Public Works Association (APWA)  
www.apwa.net
MMA Policy Committee on Public Works, Transportation and Public Utilities

Best Practice Recommendation: Protecting Municipal Vehicles from Storm Treatment Corrosives

**BEST PRACTICE:** Develop a practice of washing public works and other municipal vehicles during winter months to remove corrosive substances covering vehicles in order to protect and extend the life of the vehicles.

Cities and towns are increasingly using liquid calcium chlorine and liquid magnesium chlorine to pre-treat local roads before winter storms and icy conditions. The chemical solutions are used to pre-treat roads so that snow and ice melt on contact, and are considered to be more effective than more conventional treatments (such as salt and sand) at certain times. These road treatment products are highly corrosive, however, and can damage vehicles. For example, treatment brine will corrode public works and other municipal vehicles that are deployed during storms.

Treatment brine and other snow and ice treatment materials should be removed from municipal vehicles as quickly as possible. It is recommended that cities and towns wash vehicles regularly during winter months and keep the frame, chassis, body and attachments free from corrosive chemicals, road grime, salts, and dirt that lead to vehicle damage.

The American Association of State Highway Transportation Officials (AASHTO), in "Update of the AASHTO Guide for Snow and Ice Control," published in 2008, recommends the following:

"Snow and ice control equipment should be washed frequently to minimize corrosion, improve operating efficiency, and extend its useful life. Washing facilities should be designed to minimize environmental impact. Pressure washers and hot water may be used for effective cleaning and water conservation. Washing equipment may be portable or fixed depending on an agency's overall needs. Electric or internal combustion motors drive high-pressure pumps, and water-heating capability is available on some units. Items such as pressure washers and high-pressure pumps are relatively inexpensive and may be acquired through the procurement process.

"Wash-water handling systems usually involve separation systems and underground piping and storage tanks. The facility should be capable of disposing sediment, oil and ice control chemical solutions to meet local environmental requirements. The design and construction of these systems may be accomplished through the contract process. Agencies should check state and local regulations when developing washing facilities and waste water systems."
“Agencies should also consider sharing of equipment washing facilities with other agencies to minimize costs and adverse environmental consequences. The use of commercial equipment washing facilities, such as truck washing businesses, should also be considered since they are responsible for wash water collection and disposal.”

MMA Policy Committee on Public Works, Transportation and Public Utilities

Best Practice Recommendation: Participation in the National Joint Utilities Notification System (NJUNS)

**BEST PRACTICE:** Register with the National Joint Utilities Notification System (NJUNS) and designate employees to participate in order to coordinate the movement of municipal attachments when necessary and facilitate the removal of “double poles.”

There are an estimated 30,000 doubled-up utility poles in Massachusetts. The National Joint Utilities Notification System (NJUNS) was designed to improve the coordination between electric utilities, communications companies and municipalities for the transfer of wires and other pole attachments, and to facilitate the removal of double poles.

If a municipal fire department has alarm lines on the utility poles, it is recommended that communities designate a coordinator for these lines and have this person register in the NJUNS database.

If a municipality maintains its own streetlights, it is recommended that communities designate a coordinator and have this person (if different from fire alarms) register in the NJUNS database.

If a municipality wishes to designate another point of contact (different from fire alarms or street lights) for double pole coordination, it is recommended that this person register in the NJUNS database.

**Resources**

National Joint Utilities Notification System (NJUNS)
NJUNS Database Registration
http://web.njuns.com
MMA Policy Committee on Municipal and Regional Administration
Best Practice Recommendation: Economic Development Strategies

**BEST PRACTICE:** Proactively engage in economic development efforts to market and make municipalities attractive to investors, including: 1) taking steps to develop a municipal identity or brand that can be used as part of a strategic marketing plan; 2) participating in a variety of state and regional marketing programs (both public and private); 3) considering ways to improve the local permitting process to make the process quicker and easier to navigate; 4) and making use of incentives when consistent with local planning and financial goals.

While the above best practices are straightforward, many communities have not yet engaged in branding, marketing or other economic development initiatives. Localities are encouraged to research the potential opportunities for branding, especially if tourism is an anchor for economic activity. Economic development offices should contact the state’s Executive Office for Housing and Economic Development to pursue state-aided marketing activities, and should also review options for local tax-incentive financing programs to attract investors and development. Cities and towns should also review the advantages of Chapter 43D of the Massachusetts General Laws, a local-option statute that dozens of communities have adopted for scores of development areas.

The Government Finance Officers Association (GFOA) suggests that cities and towns create a policy for using economic incentives, including goals and objectives, a description of possible incentives and rules on how they would be used, and provisions for oversight and administration.

**Resources**

Government Finance Officers Association (GFOA):
www.gfoa.org/developing-economic-development-incentive-policy

Executive Office of Housing and Economic Development:
MMA Policy Committee on Municipal and Regional Administration

Best Practice Recommendation: Sharing Municipal Services

**BEST PRACTICE:** Evaluate opportunities to save money and improve local government services by sharing municipal service delivery with other cities, towns and governmental entities. This could include equipment-sharing arrangements, contracts for sharing municipal and school services, and group purchasing. Collaboration could take the form of inter-municipal agreements (IMAs), contracts, special acts, or the formation of districts or regions.

Cities and towns across the Commonwealth routinely look for opportunities to lower costs and improve local services by sharing services or equipment with other municipalities, regional organizations, or state government. These agreements offer substantial savings and efficiencies, yet should be framed so that all participating communities have common understandings, goals and commitments. Examples include:

- Adopting a shared services model for underutilized capital equipment via an inter-municipal agreement, such as having one community purchase a sewer flusher truck and renting it to surrounding communities to significantly offset the purchase cost.

- Sharing a Veterans' Services Officer among municipalities, with rotating office hours at community or senior centers.

- Forming a Regional Housing Services Office to monitor affordable housing compliance and other housing opportunities more broadly than in a single community.

The Government Finance Officers Association (GFOA) suggests that inter-municipal agreements should include provisions that establish the legal basis of the agreement, specific provisions for service delivery levels and performance measurement, a structure for governance, finance and dispute resolution, and a time period.

**Resources**

Metropolitan Area Planning Council (MAPC) Inter-Municipal Agreements Resource Guide
www.mapc.org/resources/intermunicipal-agreements#things
Massachusetts Association of Regional Planning Agencies:
Regionalization: A Guide for Sharing Public Services in Massachusetts
www.regionalbestpractices.org/right-for-you/what-is-regionalization/laws-for-regionalization

Massachusetts Shared Services Manual

Massachusetts Municipal Association:
Understanding and Applying the New Inter-Municipal Agreements Law

Government Finance Officers Association (GFOA):
Alternative Service Delivery: Shared Services (approved by GFOA's Executive Board, October 2007)
www.gfoa.org/alternative-service-delivery-shared-services
MMA Policy Committee on Energy and the Environment

Best Practice Recommendation: Integrated Water Resources Management Plans

BEST PRACTICE: Develop and maintain an Integrated Water Resources Management Plan (IWRMP) that promotes coordinated development and management of water, wastewater, stormwater, land and related resources. The plan should identify the local authorities responsible for each respective service and identify which permitting, design and future capital improvements should be prioritized and feasibly integrated. IWRMPs can provide a transparent and comprehensive water system investment road map.

The Massachusetts Department of Environmental Protection’s “Guide to Integrated Water Resource Management Planning” clearly outlines the benefits of an IWRMP:

"An Integrated Water Resource Management Plan is a plan that evaluates alternative means for addressing a community's current and future wastewater, drinking water, and stormwater needs and identifies the most economical and environmentally appropriate means of meeting those needs. Integrated Water Resource Management Planning is an integral component of municipal planning. Many municipalities engage in planning to determine future land use patterns, provide educational and economic opportunities for residents, ensure an adequate stock of affordable housing and in general improve the quality of life. The viability of these plans relies on a reliable source of safe drinking water and environmentally protective systems for managing wastewater and stormwater. Preparation of an Integrated Water Resource Management Plan that examines the overall ability of the water resource infrastructure to accommodate anticipated growth is an essential element of any planning effort aimed at shaping the nature and extent of future development. …

"Preparing one document in response to a number of different regulatory requirements not only saves time and money, but also promotes cooperation and coordination among municipal departments. Indeed, the preparation of an Integrated Water Resource Management Plan requires the participation of the Water Department, Sewer Department, Board of Health, Department of Public Works, Conservation Commission and Planning Department. With municipal departments working together, the community has the opportunity to prepare one plan that prioritizes all its water resource management needs in a manner that provides the greatest benefit to the public health and the environment. Bringing these departments together can save money. As roads are repaved, communities can inspect the water pipes, sewer pipes and storm drains under those roads, remove illicit connections to the sewers and storm drains, repair leaks and make any other necessary repairs. Bringing departments together can also foster solutions that address multiple problems."
1 Massachusetts Department of Environmental Protection "Guide to Integrated Water Resource Management Planning":
www.mass.gov/eea/docs/dep/water/laws/i-thru-z/iwrmp.pdf

**Resources**

U.S. Environmental Protection Agency (EPA)
Integrated Planning for Municipal Stormwater and Wastewater
www.epa.gov/npdes/integrated-planning-municipal-stormwater-and-wastewater
MMA Policy Committee on Energy and the Environment

Best Practice Recommendation: Solid Waste Management Master Plan

**BEST PRACTICE:** Develop an Integrated Solid Waste Master Plan that includes projected capital and operating costs, fees and other revenue enhancements, a schedule of feasibility studies, and goals for solid waste reduction and increased recycling rates.

MassRecycle and the Massachusetts Department of Environmental Protection’s Solid Waste Division both recommend Recycling and Waste Management Best Management Practices that should be considered when drafting an Integrated Solid Waste Master Plan. Key provisions include:

**Automated pickup:** Residents are provided with specially designed carts that are emptied by an automated vehicle. This vehicle uses a mechanical arm to pick up the cart and dump the contents. Carts range in size from 32 to 95 gallons, with most communities using 64- or 95-gallon carts. In a semi-automated collection program, the driver or attendant manually positions the cart for the lift-arm and pulls a lever to tip the cart. A number of communities in Massachusetts have converted to a two-cart system; one for trash and one for mixed (single-stream) recyclables. Others are using a cart system for single-stream recyclables only, while residents use traditional trashcans for waste. In some communities, trash is collected in a cart, and recyclables are collected in the traditional dual stream method with curbside recycling bins. Automated pickup can increase recycling rates, reduce labor costs and worker compensation claims, and reduce overall costs.

**Single-stream recycling:** With single-stream, residents place all recyclables (paper and containers) into one bin. The mixed materials are then sent to a single-stream materials recovery facility, where sophisticated sorting technology separates the paper from the containers. The container stream is sorted into the separate commodity streams as described above. Many communities have found increased recycling rates and lower waste disposal rates by employing single stream, especially when combined with automated pick up.

**Pay as You Throw:** Approximately 124 municipalities (with a total population of 1.5 million) have adopted PAYT. Some PAYT communities allow residents to dispose of one container of trash without paying, but charge for disposal of additional containers, and others charge for all waste disposal. By charging residents per container of trash, PAYT programs offer economic incentives that have substantially increased residential recycling rates and reduced the quantities of waste that need to be disposed of. Some communities have experienced a 50 percent reduction in household waste and reduced tipping fees, transfer station fees and out-of-region shipping fees. These communities
have also benefitted from increased revenues from recycled materials and increased regional employment in the recycling/manufacturing/reuse sector, all while decreasing their need for new landfill space or incinerator capacity.

As disposal costs continue to rise, an Integrated Solid Waste Master Plan incorporating education, incentives and new technologies can result in a dramatic increase in recycling rates and a significant decrease in disposal costs.

**Resources**

Massachusetts Department of Environmental Protection:
- Solid Waste Master Plan
  www.mass.gov/eea/agencies/massdep/recycle/reports/solid-waste-master-plan.html
- Recycling and Related Resources
  www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html
- Contracting
  www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html#4
- Public Events Recycling and Composting
  www.mass.gov/eea/agencies/massdep/recycle/reduce/assistance-for-municipalities.html#5
- Mandatory Recycling
  www.mass.gov/eea/agencies/massdep/recycle/reduce/mandatory-recycling.html
- Pay As You Throw
  www.mass.gov/eea/agencies/massdep/recycle/reduce/pay-as-you-throw-payt.html
- Waste Reduction Toolkit

U.S. Environmental Protection Agency:
- EPA Integrated Solid Waste Plan
  www3.epa.gov/climatechange/wycd/waste/downloads/overview.pdf
MMA Policy Committee on Energy and the Environment

Best Practice Recommendation: Join a Stormwater Management Coalition

**BEST PRACTICE:** Municipalities are encouraged to join a stormwater coalition to share resources with neighboring communities for the primary purpose of educating the public on the need to protect the environment from damaging stormwater pollution. There are already five such coalitions in eastern Massachusetts, serving more than 85 municipalities. These stormwater coalitions combine resources and expertise, reducing the individual burden on member cities and towns and developing more effective and affordable educational materials. Many of the coalitions provide materials to communities for free or at a reduced cost. Coalitions can also provide help with GIS mapping, illicit detection programs, technical assistance and procurement.

The draft Small Municipal Separate Storm Sewer System (MS4) General Permit for Massachusetts issued in 2014 by the U.S. Environmental Protection Agency (EPA) would require cities and towns to substantially expand their activities to meet the new permit rules. These proposed required actions include increased street sweeping, catch basin cleaning and repairs, GIS mapping, drainage improvements, public awareness campaigns, and illicit detection programs. For the mandated public awareness campaigns alone, cities and towns would be required to develop and distribute educational materials to multiple audiences and document the method of distribution, the evaluation methodology, and the effectiveness of the education program. Many Massachusetts communities are combining efforts to develop and implement their public education efforts by forming stormwater coalitions, pooling resources and reducing the overall cost to each participating city and town.

**Resources**

Massachusetts Municipal Association:
Regional Stormwater Coalitions

U.S. Environmental Protection Agency (EPA):
Municipal Separate Storm Sewer System (MS4) Main Page
http://www3.epa.gov/region1/npdes/stormwater/MS4_MA.html