2016 Excellence Award Entry

Category: Collection System

Organization: Public Works, Department of Waste Management
City of Norfolk, Virginia

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Member Number: 37772

Entry Title: City of Norfolk, Virginia
Life. Celebrated Daily.

Jurisdiction: City of Norfolk, Virginia
Jurisdiction Population: 242,000 (2013)
Cost per household for the project: In-house
Approximate budget: $22,054,000
Executive Summary

In February 2011, the City of Norfolk Waste Management Division suffered the loss of an employee while he attempted to clear a jammed garbage truck hopper. The Division spiraled into a chaotic state with generally poor employee morale, many service complaints by citizens, an old fleet, and sporadic safety training at best.

Following the OSHA investigation of this tragic incident, a total transformation of the operation became one the City’s highest priorities. The new City Manager directed the Public Works Director to either re-engineer the Waste Management Division or seriously consider privatizing the operations.

Innovation, leadership, customer service, resiliency, and employee commitment transformed the Division of Waste Management into one of the best performing and most efficient divisions in the City of Norfolk.

History of Program

A. How is the collection system integrated into a comprehensive solid waste program for your community?

The City of Norfolk provides and coordinates several solid waste collection programs that serve over 64,000 households and small businesses within the City. Collection services include municipal solid waste, yard waste, bulk waste, curbside recycling and dead animal removal.

In addition, the City offers convenient drop off sites for the acceptance of household hazardous waste, paper shredding, electronics, and oyster shells (for reef restoration projects). The drop off site for electronics and household hazardous waste is available 6 days a week.

The Southeastern Public Service Authority of Virginia (SPSA) provides disposal facilities for the City’s Municipal Solid Waste. SPSA is a regional cooperative that serves nine localities in the South Hampton Roads region.
B. How did you plan the initial creation of your collection system? Provide a timeline to describe how your program was implemented.

While in the midst of implementing automated collection, the city of Norfolk, Va., decided to hire outside services to tell the city's waste managers if they were going in the right direction. Norfolk's Waste Management Supervisor, Louie Jordan, was hired in 1992 to complete what his predecessor began in 1988 - semi-automated collection. "It just wasn't going right," Jordan said. "I wondered if going back to manual collection would be best." Unfortunately, he said, his downsized administrative staff of five was not enough to evaluate productivity, a collection manager's top concern. After approximately two months of data collection and two more months of analysis and meetings with residential focus groups, Jordan was presented with the hard facts:

- Too much time was wasted in the morning for check-outs;
- Substantial imbalances in city routes existed. For example, one truck with a good crew would finish its route by noon; another truck with the same amount of households served would finish by 3:00 p.m. As a result, the first crew finished would go back on the streets to help the slower crew. This, Jordan said, was a waste in resources. Too many trucks were out on the road and some collection crews were worked harder than others; and
- Vehicle maintenance needed improvement.

The analysis led to a $90,000 reduction for the next fiscal year, Jordan said.

By 1996, Gershman, Brickner & Bratton, Inc. (GBB) Solid Waste Management Consultants were asked to present a Technical Memorandum discussing the City's Solid Waste Collection Competitive Analysis. By judgment, GBB estimated that a 10 to 20 percent cost reduction was possible through either Division improved productivity or privatization of the services. GBB presented an action plan that included the following:

- Change the Organization
- Lengthen Routes and Work Hours
- Improve the Division’s Yard and Muster Areas
- Make Pre- and Post-Trip Maintenance a Mandatory Daily Activity
- Improve the Fleet Now
- Eliminate Scavenging
- Keep Yard Waste and Garbage Separate
- Extend SPSA Transfer Station Hours
- Review Routes for Truck Type Assignments
- Expand or Eliminate Commercial Service
- Increase Participation in Residential Recycling
- Conduct Internal Focus Groups Training

The last paragraph of the report was professionally blunt. "The progress made on these improvements should be reviewed in approximately six to nine months. If progress is sufficient, the Division should continue operating as such and strive to put in place an operation that maintains a higher level of efficiency, productivity and lower costs. If this is not the case, the City should proceed to make the necessary plans to compete the entire Division operation for implementation in FY 1998."

C. Describe any challenges that occurred in implementation and how you overcame them.

Tragically, in February 2011 a worker was crushed to death inside an energized hopper of an automated garbage truck. Leadership and all employees were forced to regroup, retrain and refocus on the dangerous nature of collecting refuse.

The following September, new leadership quickly moved to assess the work force, fleet, garbage routes, accident rates, customer service performance, and accounting practices. It became clear that the organization was simply going through the motions of picking up the garbage. All the work plans, SOP's, vision and values statement of the organization appeared to have no meaning to the work force. The incoming superintendent was not aware of GBB's
suggested actions 15 years earlier; therefore, a new business plan was developed and reflected the following goals, which looked like the goals suggested over a decade before by GBB:

- Operate the Division of Waste Management’s refuse service as efficiently as possible given available resources.
- Ensure expenditures of the Division do not exceed the budgeted amount for the fiscal year and procurement rules are followed.
- Ensure that appropriate inventories are in place.
- Ensure rules and regulations associated with the City’s solid waste collection service are followed.
- Engage in activities that encourage and promote long-term organizational improvements.
- Promote and sustain a successful recycling collection and education program.
- Ensure the Division of Waste Management has the appropriate equipment to carry out its refuse collection mission.
- Provide an environment that encourages and promotes ongoing employee development.
- Enhance employee morale through recognition programs and initiatives.
- Ensure Waste Management services are performed in a timely professional manner.
- Enhance understanding of refuse collection policies and procedures.
- Explain the purpose of refuse disposal fees to Norfolk citizens.
- Enhance public perception of the Integrated Waste Management Collection system.
- Work cooperatively with other cities, citizen groups, businesses and non-profit organizations to promote refuse collection education.
- Provide a comprehensive program to develop and utilize safe work practices and ensure that each employee is well trained regarding safety procedures.
- Ensure that assets are secure and properly maintained.
- Promote and sustain a successful residential hazardous waste collection site and electronic waste recycling program.
- Provide citizens with accurate information regarding Chapter 41 – Solid Waste of the City Code
- Assist citizens with efficient service or provide alternative disposal options.
- Engage citizens in taking greater responsibility for reducing their impact on the environment through increased opportunities to reduce, reuse and recycle municipal solid waste.

D. How has your collection system evolved with changes in technology, equipment, techniques, and sustainability?

Beginning in 2012, eleven new automated trucks were delivered to the Division. The design met the Public Works Director’s mandate to stop pulling down overhead lines, reduce the litter generated by collections and reduce damage to containers. The Labrie Expert Helping Hand pulls containers into the truck hopper to dump them which accomplished all three mandates. Beginning FY15, our automated truck has evolved to an automated collection on one side and a semi-manual tipper on the opposite side. This has led to a five truck reduction in our fleet and allowed us to start phasing out older semi-automated trucks.

In addition, GPS transponders have been added to all of our collection trucks so that we are able to track our trucks real-time, monitor idle time, and send alerts to management when a truck enters a restricted area. GPS is also used to verify if a street has been serviced. Our field supervisors receive emails directly from the IMPACT Call Center on their iPhones so as to reduce the time between when a call from a citizen is received and issues are resolved. This change has greatly improved Waste Management’s responsiveness to our residents.
E. What aspects of your program make it stand out above others and deserve an excellence award?

Our Apprentice Program and the removal of riding steps from our rear loaders has made us a much safer organization and a better trained organization.

For ten years, the Public Works Department has been offering Norfolk residents the opportunity to develop skills in preparation for a career in the field of Waste Management. We proudly seek Norfolk residents and veterans for recruitment. During this program, Apprentices are given the opportunity to train on city vehicles in preparation for obtaining their Commercial Driver’s License (CDL) as well as use a computer to take practice exams for the CDL on the DMV website.

Apprentices also attend safety and training forums to learn other job skills applicable for employment in the Waste Management Division. Upon completion of the six-month program, Apprentice graduates are eligible to be hired for the Refuse Collector positions through the city’s regular recruitment process. Since the program's inception, 48 or 72% of the apprentices have obtained their CDLs and 50% started careers with Waste Management.

This program is now being used in other divisions within Public Works and other departments are also looking to add an Apprenticeship program.

In the world of safety, it is thought that unsafe situations can be made safe by mitigating the hazard. Riding on the back of a rear loader cannot be done safely. The reason is clear; not all workers will follow the safety rules that have been established by the industry. The removal of rear loader steps eliminates any possibility of a worker being injured or killed because of them. To our knowledge, we are one of the first municipalities in the country to voluntarily abate this hazard.

Waste Management Division Apprentices along with City Manager, Marcus Jones, Director of Public Works, David L. Ricks, Assistant Superintendent of Waste Management, Androse Jefferson, Route Supervisor, Christopher Davis, and Refuse Collector Senior, Jasmine Latimer, supporting their new teammate at the City’s HOOPS Challenge event.
2 Collection System Design and Technology

A. What are the key elements of your collection system design?
Waste Management focuses on serving the public with high standards of safety by providing superior municipal solid waste services, training and environmental programs that are cost effective and environmentally responsible.

B. What services are provided?
Waste Management proudly provides:

- Weekly garbage, yard waste and bulk waste pickup for Norfolk residents
- Back door garbage collection service for the elderly and disabled
- Daily pickups for downtown businesses
- Free hazardous and electronic waste drop off six days a week
- Electronic waste collection 24 hours a day, 7 days a week at the City’s Towing Division
- Paper shredding - 24 hours a day, 7 days a week at the City’s Towing Division
- Contracted bi-weekly collection of curbside recyclables, including back door service
- Two public recycling drop off sites 24 hours a day, 7 days a week
- Customer care line - 11 hours a day, 5 days a week
- "On-the-Go Recycling" in public right-of-way for three business districts
- Oyster shell recycling program
- Two public resource recovery events each year (textiles, books, recyclables, HHW, plastic bags, e-waste and shredding)

C. What equipment is innovative or state-of-the-art in current collection practice?
Waste Management’s goal was to reduce the fleet from four variations of trucks to three. The current fleet is comprised of fully automated, semi-automated side loaders, rear loaders and knuckle booms. Beginning in FY14 the division began reducing side loaders and replacing them with Labrie Expert Helping Hand automated trucks with a cart tipper on the left side. This enabled the division to increase the route sizes thus resulting in a reduction of 13 routes.

The Labrie Expert Helping Hand has many features that makes it very innovative for our collection system. Depending on the type of collection for which the Expert is intended, it offers a fully automated, semi-automated, and manual systems. Fully automated vehicles are equipped with a lifting arm called “Helping Hand”, which is designed to allow a single person to collect waste in city provided carts without exiting the vehicle. The arm extends out to 10 ft. and can lift up to 400 lbs when fully extended. The arm is joystick operated and has a safety feature that is commonly referred to as a “dead-man” switch that prevents the operation of the arm if accidently hit. It is also equipped with a back-up camera, packing blade camera and also an arm camera.
D. Have you had to replace any equipment or make operational changes, and if so, what prompted the replacement or changes and how did you decide on the replacement or changes?

In FY12, the new management team met with the supervisors to get their input about the challenges they faced getting household garbage, yard waste and bulk waste picked up every week from 100,000 collection stops. What they determined was that the Division would need to rework every facet of the operation in order to meet the demands of 64,000 customers and stay within budget. The Division immediately implemented an intensive safety training program to include a daily safety tailgate meeting for every member of the work force. Waste Management staff also met with the City’s Fleet Management team headed by Assistant Director, Nikki Riddick, to initiate a partnership aimed at improving turnaround times and minimizing breakdowns. This assessment eventually led the Division to specify a new type of garbage truck that:

- Was better-suited for the older, densely populated areas within the city
- Reduces the amount of litter resulting from emptying cans in high wind conditions
- Reduces damage to trash carts
- Decreases the number of downed overhead power and communication line incidents

In FY13, we initiated use of 14 Labrie Expert Helping Hand bodies on Crane Carrier Company chassis equipped with GPS units. The Division has purchased approximately $7.5 million in new equipment since 2013.

E. How has new equipment or operational changes improved your collection system?

Waste Management has experienced a reduction in maintenance cost and improved vehicle availability. The GPS units added to the collection trucks provided data that enabled Waste Management staff to optimize collection routes and improve productivity.

Ultimately, 13 collection routes were eliminated in FY15 due to the new collection equipment. Additionally, three line supervisors and 10 Refuse Collector Senior positions were eliminated.

### Summary of Pulled Wires

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>No. of Incidents</th>
<th>% change FY12 vs. FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY12</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>FY13</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>FY14</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>FY15</td>
<td>16</td>
<td>-66.0%</td>
</tr>
</tbody>
</table>

In FY13, we initiated use of 14 Labrie Expert Helping Hand bodies on Crane Carrier Company chassis equipped with GPS units. The Division has purchased approximately $7.5 million in new equipment since 2013.

### Annual Vehicle Maintenance Cost

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Actual Cost</th>
<th>% Change FY12 vs. FY15</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY12</td>
<td>$3,584,152.00</td>
<td></td>
</tr>
<tr>
<td>FY13</td>
<td>$2,926,535.30</td>
<td></td>
</tr>
<tr>
<td>FY14</td>
<td>$2,662,629.14</td>
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<tr>
<td>FY15</td>
<td>$2,208,669.88</td>
<td>-38.4%</td>
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</tbody>
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**NOTE:** Includes Fuel, Maintenance, Parts, Labor and Sublet related expenditures.

### Hydraulic Spill Related Incidents and Clean-up Costs

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>No. of Incidents</th>
<th>Clean-up Costs</th>
<th>% Change FY12 vs. FY15</th>
</tr>
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<tr>
<td>FY12</td>
<td>11</td>
<td>$24,284.07</td>
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<tr>
<td>FY15</td>
<td>3</td>
<td>$5,994.35</td>
<td>-75.3%</td>
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Environmental Controls and Regulatory Compliance

A. What controls are in place to ensure that the collection system minimizes or mitigates environmental impact?

The City of Norfolk’s Waste Management facility is located on a 10-acre parcel of land that borders Broad Creek. This creek empties into a tributary of the Chesapeake Bay which ultimately discharges into the Atlantic Ocean. Because of on-site vehicle maintenance activities and overnight parking for 61 collection vehicles, the facility is required to have a Virginia Pollutant Discharge Elimination System (VPDES) permit. This permit was issued and is administered by the Virginia Department of Environmental Quality (DEQ). The Division was also required to develop, implement and maintain a Storm Water Pollution Prevention Plan (SWPPP). The purpose of this Plan was to identify potential sources of pollution and avoid compromising the storm water system with contaminants by establishing preemptive measures to ensure only rain water enters the storm drains. The SWPPP requires monthly monitoring and semi-annual sampling for compliance. All samples have complied with DEQ benchmarks since the Plan was approved in 2011.

Although management oversees the program, the potential sources of pollution, the general responsibilities of all personnel, and the spill reporting and clean-up requirements are discussed in an annual training session that is mandatory for all staff. During this training, different spill scenarios are discussed and staff is actively engaged in discussions and demonstrations as to what steps and actions should be taken. The importance of this training, and proper spill response procedures are stressed to staff not only because of the site’s SWPPP requirements, but also because of the State and Federal spill reporting requirements. Failing to report spills exceeding 25 gallons or one drop to the storm water drain are violations that may result in enforcement action and expensive fines for the City.

Beginning in 2009, the Waste Management facility began serving as the city-wide drop-off point for residents to properly dispose of household hazardous waste and electronic waste diverting these materials that otherwise could end up in a landfill or waterways. These materials are sent to a permitted resource recovery facilities to be properly processed. Staff is responsible for accepting, storing and packaging the waste until the contracted transporter hauls the waste for final disposal. The site briefly closed after six months for facility upgrades and to increase safety and security measures. Since re-opening in December 2011, the popularity of the program has far exceeded expectations. Usage of the center has increased 654% in just four years. In FY15 alone, over 19,000 gallons of HHW was accepted from residential customers.

<table>
<thead>
<tr>
<th>Month</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
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<tbody>
<tr>
<td>Jul</td>
<td>0</td>
<td>76</td>
<td>170</td>
<td>318</td>
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<tr>
<td>Aug</td>
<td>0</td>
<td>59</td>
<td>194</td>
<td>218</td>
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<tr>
<td>Sept</td>
<td>3</td>
<td>51</td>
<td>151</td>
<td>195</td>
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<tr>
<td>Oct</td>
<td>1</td>
<td>104</td>
<td>147</td>
<td>218</td>
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<tr>
<td>Nov</td>
<td>1</td>
<td>76</td>
<td>108</td>
<td>311</td>
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<tr>
<td>Dec</td>
<td>41</td>
<td>89</td>
<td>151</td>
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<tr>
<td>Jan</td>
<td>51</td>
<td>87</td>
<td>194</td>
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<tr>
<td>Feb</td>
<td>49</td>
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<td>243</td>
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<tr>
<td>Mar</td>
<td>85</td>
<td>94</td>
<td>181</td>
<td>210</td>
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<tr>
<td>Apr</td>
<td>50</td>
<td>103</td>
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<tr>
<td>May</td>
<td>70</td>
<td>121</td>
<td>210</td>
<td>324</td>
</tr>
<tr>
<td>Jun</td>
<td>76</td>
<td>63</td>
<td>195</td>
<td>250</td>
</tr>
<tr>
<td>Total</td>
<td>427</td>
<td>982</td>
<td>2,109</td>
<td>2,792</td>
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% Increase FY12 vs. FY15: 653.9%
B. What is the overall impact of the program on human health, environmental quality and resource conservation?

The City of Norfolk received national recognition thanks to the efforts of Keep Norfolk Beautiful, a division of the Public Works Department. Keep Norfolk Beautiful received the 2015 President Circle Award at the Keep America Beautiful national conference in Florida. Keep Norfolk Beautiful was also judged best in the nation (population 100,001 - 250,000) for creating a more beautiful, cleaner and improved environment through new technologies, improved waste handling by the Waste Management Division and public space stewardship.

C. How can you demonstrate that the collection system complies with local, state and federal regulations?

The facility has had a storm water pollution prevention plan in place since 2011 and is in full compliance with DEQ regulations.
D. Include any third-party documentation that your system is environmentally sound. You may include awards, letters of support or summaries of audit/inspection data.

4 Performance, Economics and Cost Effectiveness

A. What methods do you use to analyze how well your collection system is performing, and what results are you obtaining from your analysis?

Our Norfolk Cares IMPACT customer service center uses NorthStar’s database, a utility billing software, which enables us to log calls and extract data at the end of each month for review. Many categories are reviewed covering collection. For example: number of missed stops, bulk pick-ups, and compliments to staff. Also, our Waste Management staff attends monthly Civic League and Task Force meetings and reports findings to management.
What Are Citizens Asking?
(Calls that were logged as informational that did not require entry into Northstar and/or IMPACT)

<table>
<thead>
<tr>
<th>Waste Management</th>
<th>519 Logged Inquiries</th>
</tr>
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<tbody>
<tr>
<td>Container Repair/Replacement Status</td>
<td></td>
</tr>
<tr>
<td>Bulk Waste/Yard Waste Collection Inquiry</td>
<td></td>
</tr>
<tr>
<td>Missed Trash Collection Inquiry</td>
<td></td>
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<tr>
<td>Hazardous Waste Hours Inquiry</td>
<td></td>
</tr>
<tr>
<td>Confirmation of Bulk Pick up Tomorrow</td>
<td></td>
</tr>
<tr>
<td>Before 3 P.M. Pick Up Inquiry</td>
<td></td>
</tr>
</tbody>
</table>

B. How do you use these results for continuous improvement of your program?
Performance data is reviewed monthly and processed for corrective action or new training opportunities. Our major performance indicator is number of complaints. Our goal is to keep complaints under 100 per month, per route.

C. Do your results meet or exceed the goals established in your planning process?
During the planning process the following goals were established:

1. Focus on increasing tonnage of curbside recycling which will help protect natural resources and reduce costs.
   We exceeded this goal in FY15 by increasing tonnages of curbside recycling which helped protect natural resources and reduce cost.
   ◆ FY14 - 10,500 tons collected
   ◆ FY15 - 12,303 tons collected

2. Provide a driver training opportunity in Waste Management by maintaining an Apprentice Program to qualified participants.
   ◆ In FY15 we met this goal of all graduates of the Apprentice Program obtaining their Commercial Driver’s License.

3. Keep complaints under 100 per month, per route.
   ◆ In February 2015, the highest number of complaints in any route was 53.

D. How do you determine whether your system is cost effective and what are your current results?
The Waste Management operation was previously budgeted within the General Fund for the Department of Public Works for over thirty years.

In February of 2014, a Strategic Workforce Analysis Team, comprised of a Coordinator for Strategic Research and Analysis, Budget Team Leader, Public Works Staff, Finance, City Attorney Staff, City Auditor Staff and led by Deputy City Manager Ron Williams began the evaluation of placing Waste Management under a special revenue fund and provided a final report to the City Manager for consideration. In FY15, Waste Management converted to a special revenue fund and exceeded expectations by producing a $1.7 million fund balance in its first year.
E. Describe your maintenance schedule to ensure regular operation.

Daily at 5AM, an email is sent to the Deputy City Manager overseeing Fleet Management operations and all partners of Fleet and Waste Management. The report shows all open work orders for Waste Management collection equipment. This provides us with a means to manage our fleet daily. Preventive Maintenance is scheduled the month before and a report is sent to Waste Management detailing maintenance type and what date the equipment is due in for maintenance.

F. Do you have a recovery plan for service interruptions due to equipment malfunctions or natural disasters?

The Division of Waste Management Emergency Operations Plan is within Norfolk’s Coastal Emergency Operations Framework. Additionally, a Snow Plan for Public Works details Waste Management’s role including clearing access to public facilities and assisting Streets & Bridges in winter weather events. All plans stipulate that the primary role of Waste Management is to resume the collection of residential garbage as soon as safely possible.
G. If so, describe the plan and how often it is updated.

Following the National Incident Management System (NIMS) Command System, emergency support functions (ESFs) serve as the primary operational-level mechanism to provide assistance. There are currently fifteen (15) designated ESFs, with Public Works and Engineering designated as ESF #3. The purpose of this Emergency Support Function (ESF) is to establish policies and procedures and assign responsibilities to ensure continuation of public works services preceding, during and following potential and actual large-scale emergencies in the City of Norfolk. The Emergency Operations Framework and the snow plan is reviewed and updated yearly. Additionally, the City’s Debris Management Plan has been approved by the Virginia Department of Emergency Management.

Sea level rise and tidal flooding are major concerns within the City of Norfolk. The Waste Management Division knows the City well and which areas are prone to flooding and when. Routes can be adjusted contingent upon the timing of the flooding impact.

5 Safety

A. How did you address safety issues in planning and designing of your system, as well as in current practice?

We subscribe to SWANA’s Technical Divisions of Planning and Management, and Collections and Transfer. Safety Monday is received by the Superintendent of Waste Management and forwarded to 61 email addresses within Waste Management and Public Works. Our Safety Specialist shares each Safety Monday on Tuesday morning as this is the beginning of our work week for the majority of our force. Using as many partners as we can find, i.e. NWRA, we share news stories on accidents, injuries and deaths throughout the industry as a constant "lessons learned" reminder. The "Slow Down to Get Around" campaign was fully embraced in Norfolk in 2012 with the introduction of newly designed fully automated equipment. These stickers were placed on the back of our trucks and over the next 3 years have progressively been displayed bigger and bolder.

B. Describe your overall safety program to ensure the safety of both the citizens and staff.

Our belief is that all aspects of the Waste Management program of administration and collections begin and end with safety. Reduced accidents result in monetary savings. Training is ongoing and comprehensive to cover many safety issues. Emphasis is given to the safe operation of refuse trucks and minimizing the risks and hazards of the operation. An hour training period was established for the first Tuesday of each month. Topics covered include: Human Resources training,
hazards associated with both hot and cold weather, OSHA requirements (blood borne pathogens, PPE, CPR), and any current health or environmental concerns (i.e., Ebola and the Zika viruses). One Tuesday each quarter the training period will be extended for an additional hour to hold refresher training to include the safe operation of each type of collection vehicle, cleaning behind the packing blades, removing a container when it falls inside the hopper, or forklift operations. Additionally, the quarterly training periods will include lessons learned from the previous quarter’s Accident Review Board Hearings.

C. What improvements were made to the program and quantify how have they impacted accidents and injuries?

New equipment was introduced to better protect the worker. Instead of many different cab designs, we specified one in order to standardize the training. Instead of a driver being in a different truck daily, we assigned one truck to one driver to establish ownership and pride.

Before trucks are sent to the City’s Fleet Management for repair or service, trucks are jointly inspected by the driver and one of Waste Management’s mechanics. This process has greatly improved the downtime at Fleet Management as fleet mechanics do not have to hunt for issues.

Our supervisors and workers have embraced the new safety culture. New employees learn immediately that we have a very high safety standard at Waste Management.

D. Address written procedures, accident and injury reviews, modifications to procedures and equipment as determined from accident reviews, integration of best management practices, holding staff accountable and recognition programs.

Norfolk Waste Management measures results of accidents and injuries by keeping detailed safety records (used to submit the OSHA 300 report). In addition, Waste Management conducts a monthly Accident Review Board which was established to review all accidents and recommend appropriate training. Disciplinary actions are not part of the review process.

Reviewing workers’ compensation claims and amounts paid annually are tracked by the loss prevention section of the City’s Finance Department.

We use job safety analysis that are included in our civil service job descriptions which identify the hazards of the job and then identify ways to reduce the hazards. For example, removal of riding steps on rear loaders.

In addition, we recognize that our workforce is the most important resource for addressing the needs and desires of the community. For the past 38 years, the Department of Public Works honors workers during the Ebenezer Stevens Awards Ceremony.

<table>
<thead>
<tr>
<th>Standard Operating Procedures</th>
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<tbody>
<tr>
<td>SOP 812 Index</td>
</tr>
<tr>
<td>SOP 816 Roadside Assistance Procedures</td>
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<tr>
<td>SOP 817 Radio Procedures</td>
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<tr>
<td>SOP 819 Vehicle Maintenance &amp; Reporting Procedures</td>
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<td>SOP 820 Publicity Plan</td>
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<td>SOP 821 Damaged Utility Equipment Reporting Procedures</td>
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<td>SOP 822 Dead Animal Collection</td>
</tr>
<tr>
<td>SOP 823 New Employee Orientation</td>
</tr>
<tr>
<td>SOP 826 Phone Call Procedures</td>
</tr>
</tbody>
</table>
A. Describe concerns of your community (city, county or region) and how you responded to them.

By Ordinance, the Waste Management Division is responsible for code enforcement related to Solid Waste. Seven Special Police Officers assigned to Waste Management enforce the code. Through civic league and task force meetings, citizens have expressed concerns that our residents want enforced the most. Warnings or violations may be given for first incidents of non-compliance. Subsequent violations result in progressive enforcement.

Most common concerns
- Placing trash at the curb on a non-collection day
- Containers not properly stored after collections
- Improper set out of yard waste
- Improper set out of bulky waste
- Illegal dumping

B. What are your community outreach and engagement efforts?

Through Keep Norfolk Beautiful, (KMB) a Keep America Beautiful National Award winning affiliate, education and outreach is conducted regarding litter prevention, waste reduction and recycling. KMB holds two events each year at the Waste Management facility which draws attention to proper disposal of household hazardous waste and creates awareness around resource recovery. In total, during the fall of 2014 and spring of 2015 nearly 49,000 pounds were collected. Throughout the year, 3,911 citizens were engaged in major litter cleanups such as Clean the Bay Day, Adopt-A-Spot and the International Coastal Cleanup.

C. What is your customer service approach and how is it measured?

We developed performance measures for our recycling contract. We require Tidewater Fibre Corporation to report and meet monthly on these measures. As mentioned earlier, Waste Management’s IMPACT data is collected and reviewed to continually improve service delivery.
D. What results have you achieved with your community relations programs?

We’re proud of our Recycling Perks program. It is designed for residents to redeem points from (Perks Partners) and it helps us (Green) our City by increasing recycling participation.

E. Have you received any awards? Yes. Which ones?

2014 APWA Solid Waste Professional Manager of the Year
Awarded to Superintendent Harvey Howard

2015 Environmental Resilience Award of Excellence
Awarded to Norfolk Waste Management by the Norfolk Environmental Commission

2015 President Circle Award, Keep America Beautiful

The Waste Management Division continues to look for new ways to improve efficiency, reduce costs, and provide outstanding customer service.