

Technical Memorandum

Date: Monday, May 20, 2019

To: Jim Theiler, P.E., City of Omaha Public Works – Assistant Director

From: Doug DeCesare, P.E., Vice President, HDR Engineering, Inc.

Subject: Independent Review - West Central Sanitation Proof of Concept and Resource Allocation Plan

Executive Summary

HDR Engineering, Inc. (HDR) conducted an independent review of West Central Sanitation (WCS) bid documents, specifically on WCS' Resource Allocation Plan, Plan of Operations, and the cost estimates associated with these documents.

Based on our independent review, we found two primary areas of risk with WCS' Resources Allocation Plan and Plan of Operation. First, and most importantly, HDR found that collection efficiencies proposed by WCS are higher than were reported by the City for the other bidders. If lower collection efficiencies are achieved, in line with other bidders' estimates, it would result in higher equipment quantities and personnel numbers required to serve the contract and would have an impact on WCS' profitability. The second key area of risk was HDR found WCS to have potentially underestimated the cost of physical facilities (60 percent of HDR's estimate). These additional costs would have to be encumbered by WCS and would again affect their business proforma.

HDR did not review WCS' financial and borrowing capacity. We understand the City's Finance Department is currently conducting that evaluation.

HDR found WCS to have provided a detailed, thoughtful, and well documented Resource Allocation Plan and Plan of Operation. Collection efficiencies were supported by WCS' operating experience in other locations, and through industry reference checks. Resource costs were considered low for physical facilities, but reasonable for rolling stock and personnel salaries and benefits. If the efficiencies assumed by WCS could be achieved, the listed physical facilities, rolling stock and personnel types and numbers, seem reasonable to serve the City. WCS was well prepared with responses to questions and was timely with providing additional information. WCS' plans were supported by 10-year operational proformas.

Background

The City of Omaha (City) issued a Request for Bid (RFB) in 2018 for a long-term solid waste collection system from which four bids were received in response. The bids were quantitatively and qualitatively reviewed by a five member City working group. The working group concluded that West Central Sanitation (WCS) submitted the lowest bid, but did not adequately demonstrate they had the qualifications, experience, or adequate resources to perform under the contract terms.

The City retained HDR Engineering, Inc. (HDR) to conduct an independent review of WCS bid documents, more specifically Resource Allocation Plan, Plan of Operations and the cost estimates

associated with these documents. The review process also included conducting an interview with WCS to provide additional information and clarification to further support the basis of the submitted documents and the WCS bid. The purpose of this technical memorandum is to summarize the findings of the independent review of WCS' bid for further consideration by the City.

Summary of Documents Reviewed

In an effort to gain an understanding of the City's RFB and contract documents, to which WCS responded, HDR conducted a review of the following:

- The City's Request for Bids including Addenda and Bidder Questions/Responses.
- The City's Working Group bid review and evaluation documents.
- WCS' correspondence dated April 12, 2019 addressed to Mayor Stothert.
- WCS' Proof of Concept document.
- WCS bid proposal Exhibit G – Resource Allocation Plan.
- WCS bid proposal Exhibit H – Plan of Operations.
- WCS bid proposal – Bid forms with pricing.
- SCS Engineers provided spreadsheet based collection cost model including model inputs and assumptions.
- Additional documents submitted by WCS subsequent to the bid submittal.

WCS and HDR entered into a Non-Disclosure Agreement, as part of independent review process, and WCS subsequently provided ten-year financial projections including supporting spreadsheets and sensitivity analyses to HDR. Furthermore, WCS provided assumptions/estimates on picks-per-day, rollout timeline, truck quotes, and responses to questions. The remaining exhibits (not listed above) submitted by WCS as part of their bid package were not reviewed as part of this technical memorandum.

Methodology

HDR reviewed a number of documents in conducting our evaluation, including WCS' Resource Allocation Plan and Plan of Operation and bid prices. Other documents reviewed included the City's bid review documents; correspondence from WCS; and operational and financial models provided by WCS. In general, information was reviewed and evaluated for reasonableness based on industry standards, proposed approach, supporting documentation from WCS, and reference checks.

HDR also had several calls with WCS and requested additional information on three occasions. In reviewing the Resource Allocation Plan, HDR separately evaluated physical facilities, rolling stock, personnel, the proposed subcontractor, and extraordinary services.

The type and size of physical facilities were reviewed based on the required function, location, and fleet maintenance needs. HDR drove by the proposed WCS sites, but did not conduct extensive site specific data reviews for zoning and utilities.

Rolling stock was evaluated by the type and number of equipment. HDR reviewed collection efficiency assumptions for the City's contract and reviewed data provided by WCS from automated collection routes in other communities. We called and spoke with references (private haulers) who

utilize similar equipment (specifically front load trucks with Curotto cans). It is noted that HDR was not able to review the collection conditions in the other communities and did not conduct field investigations for the potential unique collection requirements in the City of Omaha.

The amount and type of personnel were reviewed based on the equipment being proposed and responsibilities. HDR also reviewed the proposed organization of the WCS team.

The Plan of Operation was qualitatively reviewed for approach, including implementation and continuity of operations.

Resource costs were reviewed for physical facilities, rolling stock and personnel. HDR did a high-level construction cost estimate for physical facilities in Omaha. Quotes were requested and received for rolling stock. Personnel salaries were compared to comparable City and area salaries.

Risks were identified to the extent possible based on information reviewed. HDR did not review risks as compared to other bidders, nor did we conduct field work to help verify WCS' proposed collection efficiency projections.

Resource Allocation Plan Review and Findings

HDR reviewed the Resource Allocation Plan (Exhibit G) submitted by WCS with a focus on the inputs and assumptions utilized versus industry standards and impacts as they relate to long-term collection of solid waste. Below summarizes HDR's review of the Resource Allocation Plan.

Physical Facilities – Omaha

WCS proposes to acquire and develop an approximate 5-acre site that will support parking for collection and employee/visitor vehicles, a 16,000 to 20,000 square foot truck maintenance and administrative facility, a 7,000 to 10,000 square foot warehouse facility (for cart storage), a CNG fueling system for collection trucks, a truck wash and a separate cart wash system. WCS also identified three potential properties for this site.

The three sites listed in WCS' bid were evaluated for access to major roads, appropriate sizing for listed facilities and proximity to the two existing waste system components; the landfill and Firststar Fiber's recycling facility. This high level review was done to help to determine if WCS' bid was reasonable for management of a collection fleet. All three sites, were of appropriate size, had sufficient roadway access and provided reasonable routing to the landfill and recycling centers. While certain aspects of one site seemed preferable to the others, all three sites should be sufficient for WCS' use. HDR did not review zoning and utilities available for each of the sites.

In addition to the physical site, HDR also evaluated the specific facilities listed in the bid. The listed facilities in WCS' bid seem to be of sufficient size and included the appropriate servicing and wash systems to properly support the collection fleet.

Based on the site and physical facility evaluation, HDR finds that the proposed physical facilities to support the collection operation to be generally reasonable. As HDR did not review utilities available for each site, there is some risk as to the availability and costs associated with utilities at each site.

Rolling Stock

WCS primarily proposes to utilize compressed natural gas (CNG) fueled front load (FL) trucks outfitted with Curotto cans to provide automated collection for a majority of the City's customers. HDR reviewed the proposed FL (Meridan McNeilus Front Load Curotto) trucks which include a 28 cubic yard (cy) capacity and a 12 cy hopper for a total rated capacity of 40 cy. HDR was able to observe the proposed FL truck which will be used with Curotto cans while attending the Waste Expo conference on May 8, 2019 including a discussion with the vendor. HDR believes the proposed FL trucks outfitted with Curotto cans to be a reasonable method in providing collection services in the City of Omaha based on the observation of the truck, discussions with the vendor, and discussions with hauler references.

Other trucks proposed to be utilized by WCS include low-profile automated side load (ASL) trucks, 4x4 mini side load trucks, container delivery trucks, and utility pickup trucks. WCS proposed to utilize entirely new trucks for the City's contract.

The total number of operating trucks ranged from 58 (including 40 FL) for Bid Alternative 2B-1 to 87 (including 69 FL) for Bid Alternative 1. These numbers do not include spares. WCS' FL spare truck ratio is 15-17 percent, which is reasonable, and WCS provided reasonable spare ratios for the other truck types.

Prior to responding to the RFB, WCS conducted several site visits to the City to observe existing collection operating conditions which included periods of winter weather. WCS also toured challenging collection service areas of the City with Nick Chapman, the City's Solid Waste Coordinator and experienced peak waste volume periods, such as after holidays and spring/fall for yard waste.

WCS has stated that they anticipate the FL trucks with Curotto cans will provide a 15 to 20 percent efficiency improvement over ASL trucks west of 60th Street in the City. WCS was able to demonstrate their experience using FL trucks with Curotto cans and ASL trucks in Mankato, MN and Hutchinson, MN by providing a productivity analysis that included metrics for homes-per-hour picked per-truck. The productivity analysis provided the basis as to which WCS developed their Resource Allocation Plan combined with the City's collection needs, resulting in a 10-hour day, utilizing the collection truck fleet proposed by WCS.

WCS also provided two reference sources concerning the usage of a FL truck equipped with a Curotto can in a service setting stated by WCS to be similar to the City of Omaha; Pellitteri Waste System and Walters Recycling and Refuse. HDR has spoken to both companies and they generally supported the applicability and productivity claims of WCS related to FL trucks with Curotto cans.

HDR has not conducted field work in the City and the communities referenced by WCS. As such, we cannot independently conclude that the proposed collection efficiencies can be achieved by WCS in the City contract.

Based on the above discussions and productivity analyses, HDR finds that the proposed types of trucks anticipated to be utilized by WCS to be reasonable. While WCS provided collection efficiency analyses to support their proposed number of trucks, this information cannot be independently verified as part of this scope of work. Therefore, there is risk that WCS will not be able to achieve

their proposed collection efficiency which may result in increased numbers of trucks needed to serve the City's contract.

Personnel

WCS provided their Personnel Staffing – By Bid Package plan as part of their Resource Allocation Plan. The staffing plan identifies numbers of personnel by bid alternative in 22 categories, including drivers, supervisors, mechanics, dispatchers, customer service representatives, and management, among others. The number of drivers correspond to the amount and type of rolling stock in each alternative. The collection equipment proposed by WCS are almost exclusively automated requiring only the driver to operate in most conditions.

The number and type of backup, supervisory, and support personnel identified appear to be adequate to support the proposed waste collection system. It was understood that some supervisory and support personnel, such as the Director of HR, CFO, COO, and CEO would not be full time assigned to the City's contract but rather present in Omaha 75 percent of the startup duration.

Senior management personnel identified included Don Williamson, CEO/Owner, Ray Sweetman, COO, and Taylor Williamson, CFO which all have extensive backgrounds in solid waste collections. All three participated in multiple teleconference calls and discussions with HDR, and were responsive to questions.

WCS provided detailed training protocols for new staff in the Plan of Operations. Drivers go through eight weeks of route training and two days of safety training. Training protocols were clearly outlined for dispatchers and mechanics. Additionally, WCS provided further clarification on the rollout timeline for hiring strategies, wages, incentives, and benefits.

Based on discussions and further clarifications provided by WCS, HDR finds that the proposed types of personnel anticipated to be utilized by WCS to be reasonable. As the number of personnel are directly related to the number of collection vehicles, there is risk that WCS may require additional personnel to fulfill the City's contract.

Subcontractor – Rehrig Pacific Company

WCS identified Rehrig Pacific Company as their official subcontractor for rolling cart assembly and distribution. WCS has a long standing relationship and outstanding service with Rehrig who is well known in the waste collection industry, and are considered reputable. HDR finds the proposed subcontractor for roll cart assembly and distribution to be reasonable.

Extraordinary Services

WCS described a number of extraordinary services in their Resource Allocation Plan, specifically sticker program, special collections-valet service, and clean-ups. Each service was well described and considered reasonable.

Plan of Operations Review and Findings

The WCS Plan of Operations was reviewed and compared to the City's conditions. In general, the plan appears to be well prepared and provides a comprehensive framework for both the startup and ongoing collection services required by the City of Omaha RFB specifications.

Personnel and Organization

Personnel

WCS appears to recognize the need to recruit and retain the key personnel such as supervisory staff, mechanics and drivers required to perform the necessary collection services. They also appear to fully understand that the successful recruitment of qualified drivers is vital to the performance of the contract. Details pertaining to WCS' driver recruitment plan were provided in a memo dated May 5, 2019 in response to questions presented by HDR concerning WCS' Resource Allocation Plan (Exhibit G) and Plan of Operations (Exhibit H) which were submitted with the company's bid.

The basis of the driver recruitment plan is to focus on securing a significant percentage of the Waste Management drivers who are currently performing the contract. This plan will emphasize several areas of importance to the pool of eligible drivers including the below components.

Compensation and Benefits

- Compensation - WCS plans to pay drivers on an hourly basis with overtime pay at a competitive rate.
- Profit Sharing Plan - Introduction of a profit-sharing plan for all hired drivers.
- 401K Savings Plan - The 401K plan which will be based on a 3 percent employer contribution.
- Health Care Plan - The plan will include fully paid healthcare insurance with the possibility of add-on dental and vision care.
- Paid Time Off (PTO) Plan – WCS will offer one week of PTO during the first year of employment, two weeks of PTO during the second year of service, three weeks during the fifth year and four weeks during the tenth year. In addition, three days (24 hours) of incentive paid time off is offered in the first year of employment for employees with good attendance and tardiness records.

Utilization of Facebook Advertising

- A significant usage of Facebook as a tool to attract potential driver candidates which consists of a video describing WCS including information concerning the company's operations, culture and benefits. WCS has apparently successfully utilized this type of program in Minnesota to qualified candidates and improve their current workforce.

Opportunity for Current Employees to Transfer to the Omaha Operation

- WCS is aware of five to six drivers who have expressed an interest in transferring to the Omaha operation and the company plans to provide reimbursement of relocation expenses in order to facilitate their relocation.

CDL Training Program

- WCS utilizes a CDL training program as part of its overall workforce recruitment and employment strategy, the company pays for the CDL training of as part of a ninety-day program during which the new hires are trained and evaluated. The driver trainees are utilized as a pool from which to draw route drivers and represent approximately ten percent of the planned workforce.

Type and Condition of Collection Vehicles

- WCS intends to purchase all new collection trucks for performance of the City contract and anticipates that the opportunity to operate a new truck will prove to be attractive to Waste Management drivers. In addition, the planned usage of primarily an automated fleet vs. a fleet with higher percentage of semi-automated trucks such as Waste Management utilizes will also be attractive to the Waste Management drivers.

Year Round Employment of Yard Waste Collection Drivers

- WCS intends to employ all yard waste drivers on an annual basis which should prove to be an attractive employment situation for drivers vs. the current contractor's off-season layoff practice.

The recruitment plan for drivers appears to be well planned and reasonable based on HDR's experience in the solid waste industry. In addition, WCS appears to be fully aware of the challenges the company will face with the plans actual implementation and reasonably prepared to manage the challenges.

It should be noted, however, that the recruitment plan for management, supervisory, administrative, customer service and maintenance personnel is not as clearly described and additional information concerning this portion of WCS' recruitment plans should be obtained for purposes of clarification and possible evaluation.

Organization

WCS organizational structure is adequately described by the submitted Exhibits G and H in order to gain a thorough understanding of the various positions, roles and associated responsibilities the company will be utilizing to perform the City contract. In addition, the planned organizational structure appears to be reasonable based on HDR's experience in the solid waste industry to perform the City contract. It should be noted, however, that it would useful for purposes of clarification if WCS would provide a standard organization chart indicating the positions described in Exhibit G and H as well the number of people planned for each position.

Summary

WCS' recruitment and organizational plans appear to be reasonable based on HDR's experience in the solid waste industry. However, as indicated previously a significant key factor to both plan's success will be based on the successful recruitment of a sufficient number of qualified drivers to perform the contract adequately and in accordance with the company's contractual obligations. An additional key factor to the successful performance of the City of Omaha contract will be WCS' assumption that FL fully automated trucks can be used to perform 94 to 95 percent of the required

collection services thereby reducing the total number of qualified drivers needed to perform the contract.

Pre-Implementation and Program Roll-out

The Pre-Implementation and Program Roll-out Plans described within Exhibits G and H are comprised of the following key steps:

- Acquisition of property and the construction of a depot and maintenance facility to support collection operations.
- Recruitment and staffing of the needed personnel.
- Acquisition and delivery of the needed collection and support vehicles.
- Acquisition and delivery of the needed carts to residential units.
- Effective preparation of the collection routes.
- Driver training and orientation to the designated collection routes.

WCS' proposes to manage the implementation of the above key steps in a phased process in order to provide sufficient time and focus for the successful completion of each step. The three phases are briefly described below and in detail in Exhibits H and G.

Phase One (Notice of Award - March 1, 2020)

- Hiring of the management team (scheduled for January 1, 2020).
- Preparation of the collection routes.

Phase Two (March 1st - November 1, 2020)

- Hiring of the front-line personnel such as drivers and mechanics.
- Delivery of collection equipment on a rolling schedule in three segments during September 1st to November 1, 2020.
- Delivery of carts to residential units.

Phase Three (September 1st - November 1, 2020)

- Training of personnel with equipment and WCS standard operating procedures.
- Training of personnel with required safety requirements and procedures.
- Orientation to collection routes.

Summary

WCS' Pre-Implementation and Program Roll-out Plans appears well prepared and adequate to ensure an orderly startup of the City contract based on HDR's experience in the solid waste industry. In addition, WCS has provided additional supporting information to HDR concerning the timeline for the Pre-Implementation and Roll-out plans which is detailed and was useful as a reference source in order to further clarify the plans.

It is assumed that the acquisition of property and the construction of a depot and maintenance facility to support collection operations will begin upon WCS receiving a formal Notice of Award from the City as part of Phase One. In addition, it is also assumed the ordering of carts, collection and support vehicles will also take place during Phase One. It is recommended that the City obtain

clarification concerning the timeline for performance of these important steps of the Roll-Out Program.

On an overall basis WCS' proposed Pre-Implementation and Roll-out Plans appear to be reasonable based on HDR's experience in the solid waste industry. It is recommended that the City of Omaha consider conducting monthly review meetings with WCS concerning the company's progress with conducting the Implementation of the Pre-Implementation and Roll-out Plans in order to identify potential issues and ensure the company is progressing satisfactory with the performance of the plans.

General Operating Plan

WCS' operating plan is strongly based on the successful utilization of a fully automated collection system consisting of FEL trucks with Curotto cans to service approximately 94 percent of City of Omaha's residential units. It is recognized that the utilization of this type of collection system is not consistent with the City's past experience with collection systems, however, based on a review of Exhibits G and H, supplemental information provided by WCS and discussions with the company's senior management team, HDR believes WCS' Operating Plan is reasonable based on our experience in the solid waste industry.

It should be noted that WCS has also provided information concerning the below components of the Operating Plan to address the other needed services required by the City's RFB:

- Management and supervisory plan to oversee the contract.
- Valet Service.
- Management of the Sticker Program for additional services.
- Spring Cleanup Events.
- Missed pickups and services issues.
- The customer service program.
- Winter weather events.
- Holiday collection schedule.
- City of Omaha annexation situations.
- On-route collection technology
- Vehicle replacement plans.
- Cart replacement and delivery plan.

Furthermore WCS has proposed to conduct the start of collection operations on a phased basis as indicated below:

- One third of the collection routes as of November 1, 2020.
- A second third of the collection routes as of December 1, 2020.
- The final third of collection routes as of January 1, 2020.

The phased approach to the start of operations should provide both WCS and the City with the ability to manage the start of operations in an organized basis and provide sufficient time and resources to deal with any unanticipated issues. It is recommended that the City obtain additional

clarification from WCS concerning the details of this planned phase approach to the start of operations.

HDR believes the other components of the Operating Plan to be reasonable based on our experience in the solid waste industry. It is recommended that the City of Omaha consider conducting monthly review meetings with WCS concerning contract performance especially during the initial six months of the contract in order to identify potential issues and assist with ensuring the successful performance of the contract.

Resource Cost Review and Findings

HDR reviewed the WCS bid forms and pricing for physical facilities, rolling stock, personnel, other costs and pro-forma information associated with the proposed resources to determine reasonability and adequacy with industry expectations.

Physical Facilities – Omaha

WCS provided anticipated costs for the acquisition and construction of physical facilities for implementation of the requirements under the contract. HDR prepared an engineer's opinion of probable cost evaluation for comparison with the listed Physical Facility pricing in the bid. This opinion was based on HDR's experience on similar projects in the region. Through this evaluation, it was determined that WCS' proforma pricing of these facilities is about one-half to one-third of what these facilities may cost given the nature of the market currently in Omaha, NE.

Based on the above cost comparison, it appears that the WCS bid for acquisition and construction of physical facilities were undervalued. HDR finds that the WCS physical facilities cost estimates are underestimated given the market conditions in the City. There is financial risk to WCS if the capital costs are higher than they budgeted.

Rolling Stock

WCS provided price quotes from vendors for the following rolling stock:

- FEL Curotto Truck Body: McNeilus
- ASL Truck Body: Bridgeport
- FEL & ASL Truck Chassis: Mack & Peterbilt (CNG), 9 & 12 Liter Options
- Mini-Truck & Cart Truck Chassis (CNG): Atwater Ford
- Cart Truck Body: Delta Waseca
- Mini-Truck Packer Body: Under-CDL.Com
- Supervisor Trucks (CNG): Atwater Ford

HDR reviewed the price quotes and compared them to the WCS bid documents. While some quotes came in higher than WCS budgeted, the FL/ASL truck costs came in lower which resulted in an overall cost savings to WCS from their price proposal. WCS is proposing 100 percent new fleet that is 100 percent CNG at the beginning of the contract term. In year seven, WCS is proposing to begin replacement of one-third of the total rolling stock on hand with no rolling stock exceeding twelve years in age. HDR finds that the WCS rolling stock proposal, both initial cost estimates, depreciation and replacement beginning in year seven, in the bid options, to be reasonable.

Personnel

WCS provided additional financial information regarding proposed personnel salaries and benefits to assist in determining the costs associated with the Resource Allocation Plan. Under each bid option, WCS is proposing to hire the following employee categories:

- Route Drivers
- Swing Drivers
- Mini 4x4 Helpers/Trainees
- Operations Managers
- Site Manager
- Cart Delivery Personnel
- Cart Washing Personnel
- Fleet/Facility Manager
- Dispatch Operator
- HR Assistant
- Mechanics-Calculated hourly and lump-summed into total maintenance expense.

WCS provided compensation estimates for each of the positions. In addition to hourly salary, WCS is offering overtime pay, profit sharing, and a 401(k) matching program as well as fully paid health benefits, with add-on vision and dental. Swing drivers will receive an additional bonus based on job description pay each quarter. PTO starts at one week in the first year with incentive PTO available if employees are not tardy or exhibit behavioral issues. PTO increases to two weeks in year two, three weeks in year five, and four weeks in year 10 of employment with WCS.

HDR reviewed and compared salaries proposed by WCS to the City of Omaha salary schedule, the Douglas County salary schedule and job availability on the internet in the Omaha area. HDR finds that the WCS personnel salaries and benefits are reasonable.

Other Costs

The Resource Allocation Plan, submitted by WCS, addressed extraordinary services including a yardwaste sticker program, special collections and valet services and spring and fall clean-ups. WCS costs for the extraordinary services are minor expenses when reviewing the overall bid packages received. HDR finds that the WCS costs submitted for the extraordinary services portion of the bid packet are reasonable.

Operational Pro-Forma

Under the terms of the NDA, WCS submitted operational pro-forma information to HDR as part of the independent review process, for all bid options requested under the City of Omaha Solid Waste Collection bid packet. Each bid option included a 10-year projected income statement, balance sheet, and cash flow analysis. Pro-forma operational statements should be considered as a projection or estimated financial statement that attempt to present reasonably accurate financial information if certain assumptions hold true and are utilized routinely in formulating business plans, estimating cash requirements or when submitting financing proposals.

HDR reviewed the WCS operational pro forma assumptions and projections as they related to the WCS Resource Allocation Plan and Plan of Operations. The WCS operational pro forma included the following:

- A ten-year operational model for each of the bid options.
- Direct and indirect employee assumptions that include a detailed staffing report with salaries, taxes, benefits, training, profit sharing, office related expenses, travel, and recruitment.
- Input for tangible and intangible assets and investments with appropriate depreciation and amortization.
- Debt obligations for equipment, real estate and property with interest rates, interest and principal payments.
- A breakeven analysis that illustrates earnings before interest, tax, depreciation and amortization (EBITDA), timing for net income, EBITDA and operating cash flows.
- A detailed set of financial statements for each bid option for the Income Statement, Balance Sheet and Cash Flow Statement over a ten year period.
- Stockholder equity information.

The WCS operational pro-forma documents were reviewed by HDR as a basis for comparison and analysis of resource costs only. Based on this limited review, HDR finds that the WCS operational pro-forma documents are reasonable as they relate to the WCS projections and assumptions.

Conclusions

There is risk in the basis of some of the costs assumed by WCS. First, collection efficiencies expected by WCS are higher than reported to the City for the other bidders. While WCS provided collection efficiency data to support their proposed productivity based on their experiences, it is not clear that these production rates could be achieved in the City. Lower collection productivities would result in higher equipment numbers and personnel numbers that would result in profitability impacts to WCS. Secondly, HDR found WCS to have potentially underestimated the cost of physical facilities.

HDR found WCS to have provided a detailed, thoughtful, and well documented Resource Allocation Plan and Plan of Operation. Collection efficiencies were supported by WCS' operating experience in other locations, and through industry reference checks. Resource costs were considered low for physical facilities, but reasonable for rolling stock and personnel salaries and benefits. WCS was well prepared with responses to questions and was timely with providing additional information. WCS' plans were supported by 10-year operational proformas.