

MEMORANDUM

October 25, 2018

TO: Government Operations and Fiscal Policy Committee

FROM: Kristen Latham, Senior Legislative Analyst
Aron Trombka, Senior Legislative Analyst *AT*
Office of Legislative Oversight

SUBJECT: Office of Legislative Oversight Memorandum Report 2018-4: *Reverse Auction Purchasing*

The Council released Office of Legislative Oversight (OLO) Memorandum Report 2018-4: *Reverse Auction Purchasing* on December 12, 2017. The County Council directed the OLO to prepare a report that describes the use of reverse auctions in public sector purchasing, identifies the benefits and drawbacks, and discusses potential future use by the Montgomery County Government.

**COUNCILMEMBERS PREVIOUSLY RECEIVED COPIES OF REPORT 2018-4
AND SHOULD BRING A COPY OF THE REPORT TO THE WORKSESSION.**

The report is available online at:

<http://www.montgomerycountymd.gov/OLO/Reports/CurrentOLOReports.html>

OLO will present the report to GO Committee members at the worksession. The Executive Summary of Report 2018-4 appears on ©1-4.

Cherri Branson, Director, Office of Procurement, and David Dise, Director, Office of General Services will represent the Executive at the worksession. Comments about this report from the Chief Administrative Officer appear on ©5-6.

INTRODUCTION TO REVERSE AUCTIONS

The term, "reverse auction," refers to a purchasing method in which vendors compete to sell goods or services to a buyer. In a reverse auction, the buyer identifies the goods and services to be purchased and potential sellers bid against one another to make the sale; this type of auction typically produces progressively lower prices.

The reverse auction process is similar, in many ways, to more traditional procurement methods. As with other solicitations, the reverse auction process begins with the purchasing department issuing a solicitation document that describes the required specifications for the goods and services to be purchased, as well as the terms and conditions of the contract. Government purchasing departments commonly require pre-registration for vendors that are interested in participating in a reverse auction (similar to the pre-registration requirement for sealed bids).

In a reverse auction, registered vendors submit bids online. As the reverse auction progresses, bidders can view all bids in real time (with vendor names concealed), including the current low bid. Unlike most other solicitation methods, vendors participating in a reverse auction may submit multiple bids, adjusting their prices lower in response to their competitors' offers. The auction continues either for a pre-determined duration (for example, ten minutes) or until a designated amount of time passes since the last bid. When the bidding closes, the buyer completes the contract award using the same process used for traditional solicitations.

Reverse auctions are performed exclusively online, most commonly with a private sector service provider. The service provider hosts the reverse auction (often on a dedicated web page) and may offer other services such as vendor notification, distribution of solicitation documents, and vendor training. The most common forms of compensation are a flat fee paid by the seller or a fee set as a percentage of the transaction that is paid either by the seller or by the buyer.

OLO FINDINGS

Based on a review of academic research and interviews with public sector procurement officials, OLO offers the following six major findings from this report:

1. State and local government procurement officers who have managed reverse auctions believe that reverse auctions can produce significant cost savings.

State and local government procurement officers who managed reverse auctions attest that reverse auctions produced significant cost savings even when considering the offsetting costs associated with running a reverse auction.

2. It is difficult to precisely calculate the direct effect of reverse auctions on contract price.

OLO did not identify a single state or local government that could definitively determine the precise cost savings attributed to a reverse auction. Such a definitive determination would be extremely difficult to calculate as it would require a buyer to conduct nearly identical bid solicitations at nearly the same point in time – a practice that is rarely undertaken. Contract costs for most goods and services are subject to fluctuations based on changing market conditions such as product supply, transportation and labor costs, along with the number of potential sellers.

3. Only certain types of goods and services are well suited for purchase via reverse auction.

Reverse auctions are not appropriate for all types of purchasing, but are best suited for purchasing goods and services that are readily defined with precise and unambiguous specifications. In addition, reverse auctions have been found to work particularly well when purchasing items with minimal differences in product quality and which are sold by multiple vendors.

4. *Reverse auctions are not appropriate for small dollar value purchases in which the cost savings do not offset additional costs.*

Reverse auctions are not appropriate for small scale purchases. The dollar value for small purchases are unlikely to offset the service provider fees and the administrative and staff costs associated with executing a reverse auction.

5. *Pre-qualification of vendors is essential when using price as the final determinant for contract award.*

Government agencies that use reverse auctions universally pre-qualify vendors prior to the bidding stage. Government buyers establish minimum acceptable qualifications for bidders including those related to the vendor's credentials, experience, expertise, past performance, labor pool, equipment, and other standards. Vendors must demonstrate that they meet all the pre-qualification standards to be included in a short list of those invited to bid in the reverse auction.

6. *Government procurement officials interviewed by OLO do not believe that use of reverse auctions deters vendors from responding to solicitations.*

A common critique is that reverse auctions unfairly aid the buyer at the expense of the seller by lowering profit margins. Thus, vendors may opt out of solicitations offered through a reverse auction. However, none of the procurement officers interviewed by OLO reported that the use of reverse auctions altered the number or type of vendors that submitted bids.

POTENTIAL FUTURE USE

The Department of General Services (DGS) recently award a contract for a service provider to host reverse auction(s) for the future County Government and/or COG purchases of fuel. The contract includes a provision allowing the County to retain the service provider to conduct reverse auctions for commodities other than fuel.

OLO RECOMMENDATIONS

Based on the above findings, OLO presents four recommendations:

1. *The Executive Branch should educate departmental contract and budget managers about the soon-to-be-available reverse auction provider services available for County Government purchases.*

Once the County Government awards the pending contract for a service provider to host future reverse auctions, the Executive Branch should inform contract managers and budget managers department about the potential for reverse auctions to produce cost savings for certain purchases and of the availability of the service provider to host a reverse auction.

2. *The Executive Branch should proactively review upcoming solicitations to identify goods and services that are suitable for reverse auction bidding.*

Reverse auctions are best suited for purchasing goods and services sold by multiple vendors for products that have clearly defined specifications. Reverse auctions should be used only for contracts of sufficient dollar value to offset fees and administrative costs. The Executive Branch should review upcoming purchases to identify those that are suitable for reverse auction bidding.

3. The Executive Branch should pilot the use of reverse auctions for at least two procurements by the end of Calendar Year 2019.¹

Following execution of the pending reverse auction service provider contract, the County Government should pilot the use of this bidding methodology. A pilot would allow for evaluation of several matters including: methods for assessing the effect of reverse auctions on contract price; administrative and staffing requirements; vendor pre-qualification procedures; services provided by the provider; and responses from the vendor community. The pilot should include a minimum of two solicitations (other than for fuel) by the end of Calendar Year 2019.

4. The Executive should report to the Council by the end of Calendar Year 2019 on its efforts to: (a) educate departmental staff regarding reverse auctions; (b) identify goods and services that may be suitable for reverse auction bidding; and (c) pilot the use of reverse auctions.²

The Executive Branch should report to the Council by the end of Calendar Year 2019 on the topics addressed in the first three recommendations.

¹ When OLO issued this report in December 2017, this recommendation called for the Executive to complete the pilot “during the next 12 months.” Given the current date and the upcoming change in administration, OLO has amended the recommendation to call for the completion of the pilot by the end of Calendar Year 2019.

² When OLO issued this report in December 2017, this recommendation called for the Executive to report back to the Council “in the Fall of 2018.” Given the current date and the upcoming change in administration, OLO has amended the recommendation to call for the report to Council by the end of Calendar Year 2019.

Executive Summary

REVERSE AUCTION PURCHASING

OLO Report Number 2018-4

December 12, 2017

The County Council directed the Office of Legislative Oversight (OLO) to prepare a report that describes the use of reverse auctions in public sector purchasing, identifies the benefits and drawbacks, and discusses potential future use by the Montgomery County Government.

County Source Selection Methods

The County Code establishes multiple methods for County Government purchases, also known as "source selection" methods. Three source selection methods are relevant to this report.

Invitation for Bid: An invitation for bid (IFB) is a solicitation in which the County Government invites vendors to submit sealed bids by a specified deadline. An IFB solicitation is a competitive process in which the County Government awards the contract to the responsible and responsive bidder that offers the lowest price.

Request for Proposal: A request for proposal (RFP) is a solicitation in which the County Government requests vendors to submit proposals that will be evaluated based on pre-determined criteria.

Electricity Purchasing: The County Code provides a distinct set of rules governing the procurement of electricity. The County Government purchases electricity through a method called a "Request for Energy Proposals (RFE)." As defined in the Procurement Regulations, an RFE "is a solicitation for a proposal for the supply of electricity in which price, and quality, if deemed appropriate, is balanced to meet the electricity needs set forth in the solicitation."

Reverse Auctions

The term, "reverse auction," refers to a purchasing method in which vendors compete to sell goods or services to a buyer. In a traditional auction, the seller offers goods and services and potential buyers bid against one another; this method typically produces progressively higher prices. In a reverse auction, the buyer identifies the goods and services to be purchased and potential sellers bid against one another to make the sale; this type of auction typically produces progressively lower prices.

Process: The reverse auction process is similar, in many ways, to a more traditional procurement methods such as an invitation for bid (also known as a "sealed bid"). As with other solicitations, the reverse auction process begins with the purchasing department issuing a solicitation document that describes the required specifications for the goods and services to be purchased, as well as the terms and conditions for award of the contract. Government purchasing departments commonly require pre-registration for vendors that are interested in participating in a reverse auction (similar to the pre-registration requirement for sealed bids and other methods).

In a reverse auction, registered vendors submit bids online. As the reverse auction progresses, bidders can view all bids in real time, including the current low bid. Most commonly, the online reverse auction platform only shows bid amounts but conceals the names of the vendors submitting the bids. Unlike most other solicitation methods, vendors participating in a reverse auction may submit multiple bids, adjusting their prices lower in response to their competitors' offers. The auction continues either for a pre-determined duration (for example, ten minutes) or until a designated amount of time passes since the last bid. When the bidding closes, the buyer completes the contract award using the same process used for traditional solicitations.

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Service Providers: Reverse auctions are performed exclusively online. Most commonly, state and local governments that engage in reverse auctions employ a private sector service provider. The service provider hosts the reverse auction (often on a dedicated web page) and may offer other services such as notification to vendors, distribution of solicitation documents, and vendor training. The most common forms of compensation are a flat fee paid by the seller or a fee set as a percentage of the transaction that is paid either by the seller or by the buyer.

Past County Government Use of Reverse Auctions

The County Government's sole use of reverse auctions has been for energy purchases.

Electricity: In 2006, the County Government participated in served as the lead buyer for a group of 18 local governments that held a reverse auction for the purchase of electricity. After the contract expired, the County Government did not conduct another reverse auction for electricity. Instead, the County purchased electricity by means of bridge contracts based on prices negotiated by the State of Maryland and other jurisdictions.

Natural Gas: In 2007, Montgomery County joined a Metropolitan Washington Council of Governments (COG) cooperative purchasing reverse auction to acquire natural gas at a fixed price per therm for a 36-month time period. The contract produced by the reverse auction resulted in a greater than 50% reduction in the cost per therm. The County has not participated in another reverse auction for natural gas since 2007. Rather, the County Government currently purchases natural gas through a bridge with a Fairfax Counts contract with favorable pricing.

Gasoline: Over the past decade, the County Government has purchased gasoline through the COG Cooperative Purchasing Program. This cooperative purchase arrangement used reverse auctions in 2008 and 2010 to purchase gasoline. As the lead agency, the County Government established pricing for will-call and automatic delivery of four grades of gasoline. The County Government plans to continue to use reverse auctions for future gasoline purchases future.

Potential Use of Reverse Auctions by the County Government

With the assistance of Office of Procurement staff, OLO identified three recent contracts the reasonably could have been bid through a reverse auction:

- **Department of Liquor Control (DLC) Paper Bags** – DLC entered into a contract for the purchase of paper bags used in retail stores. The solicitation specified the required dimensions and thickness for each of five bag sizes. Vendors submitted sealed bids for each bag size with an assumed purchase of 500,000 units of each size. Bid prices were to include delivery cost to a specified location within a specified time frame.
- **Recreation Department Apparel** – The Recreation Department entered into two contracts to purchase t-shirts and other apparel for and athletic league participants. Each contract included material, design, and fabric specifications for apparel in different sizes and styles. The Department issued both contracts under the Local Small Business Reserve Program.
- **Road Salt** - The County Government was the lead agency in a COG cooperative purchase of road deicing rock salt. The solicitation included a detailed description of the product specifications. Bidders offered per ton unit prices for rock salt (with and without delivery) for each of four geographic zones.

Future Use: The Department of General Services (DGS) is currently working to issue a request for proposal a contract with a service provider to host reverse auction(s) for the future County Government and/or COG purchases of fuel. DGS intends for the contract to retain the service provider to conduct reverse auctions for commodities other than fuel.

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Summary of OLO Findings

Based on a review of academic and government assessments and interviews with public sector procurement officials, OLO offers the following nine major findings from this report:

1. *State and local government procurement officers who have managed reverse auctions believe that reverse auctions can produce significant cost savings.*

State and local government procurement officers who managed reverse auctions attest that that reverse auctions produced significant cost savings even when considering the offsetting costs associated with running a reverse auction.

2. *It is difficult to precisely calculate the direct effect of reverse auctions on contract price.*

OLO did not identify a single state or local government that could definitively determine the precise cost savings attributed to a reverse auction. Such a definitive determination would be extremely difficult to calculate as it would require a buyer to conduct nearly identical bid solicitations at nearly the same point in time – a practice that is rarely undertaken. Contract costs for most goods and services are subject to fluctuations based on changing market conditions such as product supply, transportation and labor costs and the number of potential sellers.

3. *Only certain types of goods and services are well suited for purchase via reverse auction.*

Reverse auctions are not appropriate for all types of purchasing, but are best suited for purchasing goods and services that are readily defined with precise and unambiguous specifications. In addition, reverse auctions have been found to work particularly well when purchasing items with minimal differences in product quality and which are sold by multiple vendors

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5. *Pre-qualification of vendors is essential when using price as the final determinant for contract award.*

Government agencies that use reverse auctions universally pre-qualify vendors prior to the bidding stage. Government buyers establish minimum acceptable qualifications for bidders including those related to the vendor's credentials, experience, expertise, past performance, labor pool, equipment, and other standards. Vendors must demonstrate that they meet all the pre-qualification standards to be included in a short list of those invited to bid in the reverse auction.

6. *Government procurement officials interviewed by OLO do not believe that use of reverse auctions deters vendors from responding to solicitations.*

A common critique is that reverse auctions unfairly aid the buyer at the expense of the seller by lowering profit margins. Thus, vendors may opt out of solicitations offered through a reverse auction. However, none of the procurement officers interviewed by OLO reported that the use of reverse auctions altered the number or type of vendors that submitted bids.

7. *The County Government's sole use of reverse auctions has occurred for the purchase of energy.*

The County Government's first venture into reverse auction procurement occurred in 2006 as part of a cooperative purchase of electricity. Subsequently, the County Government participated in a COG sponsored reverse auction for natural gas, and multiple COG sponsored reverse auctions for

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gasoline. The County Government has not ever used a reverse auction for the purchase of any other type of good or service. Today, the only active County Government contracts resulting from a reverse auction are for gasoline.

8. Some recent County Government contracts could have been suitable for reverse auction bidding.

OLO examined recent County Government solicitations and identified a limited number of contracts that would have been good candidates for reverse auction bidding, including those for paper bags for liquor stores; shirts and other apparel for Recreation Department staff and program participants; and (c) rock salt for roadway de-icing.

9. A soon-to-be issued request for proposal will provide the County Government with access to reverse auction services.

The Department of General Services plans to issue a request for proposal (RFP) soon to contract with a service provider to host reverse auctions for future purchase of fuel and other commodities.

OLO Recommendations

Based on the above findings, OLO presents four recommendations to the County Council.

1. Request that the Executive Branch educate departmental contract and budget managers about the soon-to-be-available reverse auction provider services available for County Government purchases.

Once the County Government awards the pending contract for a service provider to host future reverse auctions, the Executive Branch should inform contract managers and budget managers department about the potential for reverse auctions to produce cost savings for certain purchases and of the availability of the service provider to host a reverse auction.

2. Request the Executive Branch to proactively review upcoming solicitations to identify goods and services that are suitable for reverse auction bidding.

Reverse auctions are best suited for purchasing goods and services sold by multiple vendors for products that have clearly defined specifications. Reverse auctions should be used only for contracts of sufficient dollar value to offset fees and administrative costs. The Executive Branch should review upcoming purchases to identify those that are suitable for reverse auction bidding.

3. Request that the Executive Branch pilot the use of reverse auctions for at least two procurements during the next 12 months.

Following execution of the pending reverse auction service provider contract, the County Government should pilot the use of this bidding methodology. A pilot would allow for evaluation of several matters including: methods for assessing the effect of reverse auctions on contract price; administrative and staffing requirements; vendor pre-qualification procedures; services provided by the provider; and responses from the vendor community. The pilot should include a minimum of two solicitations (other than for fuel) during the upcoming 12 months.

4. Request that the Executive report to the Council in the Fall of 2018 on its efforts to: (a) educate departmental staff regarding reverse auctions; (b) identify goods and services that may be suitable for reverse auction bidding; and (c) pilot the use of reverse auctions.

The Executive Branch should report to the Council in the Fall of 2018 on the topics addressed in the first three recommendations.



OFFICE OF THE COUNTY EXECUTIVE

Isiah Leggett
County Executive

Timothy L. Firestine
Chief Administrative Officer

MEMORANDUM

November 29, 2017

To: Chris Cihlar, Director, Office of Legislative Oversight
From: Timothy L. Firestine, Chief Administrative Officer *Timothy L. Firestine*
Subject: Draft OLO Report 2018-4: Reverse Auction Purchasing

Thank you for the opportunity to comment on Draft OLO Report 2018-4: Reverse Auction Purchasing.

We concur with the observation that reverse auctions may be a feasible purchasing strategy when the goods and services sought possess certain factors such as 1) capable of clear and unambiguous specifications; 2) minimal difference in product quality; and 3) the goods sought are sold by multiple vendors. Taken together, these factors indicate a uniformity in goods and a competitive marketplace. Where such conditions exist, price may be the only distinguishing factor for a purchaser to consider. Where these conditions exist, the reverse auction purchasing mechanism—which allows sellers to bid against each other by submitting price quotes in real-time until the lowest price submitted wins—allows the buyer to make a purchasing decision based on price as the only relevant determining factor.

As the report further notes, the circumstances where reverse auction would be a feasible purchasing strategy are rare and, therefore, the reverse auction strategy has been used by the County in three instances in the last 12 years. To identify additional instances in which the reverse auction purchasing strategy may be a feasible, appropriate, and cost-savings mechanism to acquire goods and services, we plan to award a contract with a service provider to host future reverse auctions. The Office of Procurement expects a contract award to take place in the Spring of 2018.

Following are the answers to the four recommendations noted in the draft:

Recommendation #1: The Council should request that the Executive Branch educate Departmental contract and budget managers about the soon-to-be-available reverse auction provider services available for County Government Purchases.

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Chris Cihlar, Director, Office of Legislative Oversight
November 29, 2017
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CAO Response: Outreach and education are necessary components of the reverse auction service provider's efforts to identify goods and services suitable for acquisition through the reverse auction mechanism.

Recommendation #2: The Council should request the Executive Branch to proactively review upcoming solicitations to identify goods and services that are suitable for reverse auction bidding.

CAO Response: As noted above, the identification of additional opportunities for the reverse auction purchasing method will be one component of the functions of the reverse auction service provider.

Recommendation #3: The Council should request that the Executive branch pilot the use of reverse auctions for at least two procurements during the next 12 months.

CAO Response: We believe it is best to await the findings of the reverse auction service provider to determine which commodities would best meet the reverse auction criteria noted above: 1) capable of clear and unambiguous specifications; 2) minimal difference in product quality; and 3) the goods sought are sold by multiple vendors. Taken together, these factors indicate a uniformity in goods and a competitive marketplace. Where such conditions exist, price may be the only distinguishing factor for a purchaser to consider.

Recommendation #4: The Council should request that the Executive report to the Council in the Fall of 2018 on its efforts to: (a) educate departmental staff regarding reverse auctions; (b) identify goods and services that may be suitable for reverse auction bidding; and (c) pilot the use of reverse auctions.

CAO Response: The time frame--12 months from issuance of this report—is insufficient to identify additional reverse auction opportunities, conduct the reverse auctions, and conduct a robust examination of “lessons learned.” We would suggest a time frame of 18-24 months.

Thank you again for your work on this report. If you have questions, please contact Fariba Kassiri, Assistant Chief Administrative Officer, at (240) 777-2512 or Fariba.Kassiri@montgomerycountymd.gov.

TLF:cb

c: Fariba Kassiri, Assistant Chief Administrative Officer
Bonnie Kirkland, Assistant Chief Administrative Officer
Cherri Branson, Director, Office of Procurement
David Dise, Director, Department of General Services
Marc Hansen, County Attorney, Office of the County Attorney