

**Date:** July 24, 2019

**To:** Board of Directors

**From:** Doug Kelsey

**Subject:** RESOLUTION NO. 19-07-56 OF THE TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON (TRIMET) BOARD OF DIRECTORS, ACTING IN ITS CAPACITY AS THE TRIMET CONTRACT REVIEW BOARD (TCRB), EXEMPTING FROM COMPETITIVE BIDDING REQUIREMENTS A CONTRACT FOR THE STEEL BRIDGE SIGNALS AND COMMUNICATIONS SYSTEMS EQUIPMENT PROJECT

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**1. Purpose of Item**

This Resolution authorizes the TriMet Board of Directors (Board), acting in its capacity as the TriMet Contract Review Board (TCRB), to exempt from the low bid process a public improvement contract for construction services for TriMet’s Steel Bridge Signals and Communications Systems Equipment Project (Project). The Project will result in the procurement and installation of new signals and communications equipment on the Steel Bridge. The TCRB’s approval of this Resolution will allow TriMet to initiate a competitive Request for Proposals (RFP) process and select the most highly qualified proposer for award of this contract.

**2. Type of Agenda Item**

- Initial Contract
- Contract Modification
- Other - Exemption from Low Bid

**3. Reason for Board Action**

This exemption from competitive bidding must be approved by the TriMet Contract Review Board (TCRB) in accordance with state law and the TCRB Rules.

**4. Type of Action:**

- Resolution
- Ordinance 1<sup>st</sup> Reading
- Ordinance 2<sup>nd</sup> Reading
- Other \_\_\_\_\_

**5. Background**

The Steel Bridge light rail and signaling system began serving the public in 1986 when the original light rail opened for service as the critical link between Gresham and downtown Portland. Spanning the Willamette River, the bridge performs multiple functions. The bottom deck carries Union Pacific Railroad (UPRR) cargo trains and includes a separate pedestrian and bike path. The top deck carries private and commercial traffic on both outside

lanes, with exclusive light rail train traffic in the two center lanes. The center section lifts to allow marine traffic to pass below.

The Steel Bridge is central to TriMet's operation, with nearly every light rail line passing across it. To the west, the Blue and Red Lines continue along 1<sup>st</sup> Avenue and Green and Orange Lines continue to 5<sup>th</sup> and 6<sup>th</sup> Avenues. To the east, the Yellow Line extends north and the Blue, Red and Green Lines extend east. The bridge is one of TriMet's most important assets.

The new signals and communication equipment system will replace the existing relay system with microprocessors across the bridge in cabinets, and in a new signals bungalow near the east abutment. With the current relay system, maintenance personnel are required to attend to relays in each of the four cabinets on the bridge, working within inches of auto and train traffic. The new updated system will use hardware that requires far less maintenance, is more reliable and robust, and will allow for better on-time performance.

TCRB Rule V(A) and ORS 279C.335(2) provide that the Board, acting in its capacity as the TCRB, may exempt a contract from competitive sealed bidding requirements upon approval of the following written findings submitted by the public contracting Agency:

- (a) The exemption is unlikely to encourage favoritism in awarding public improvement contracts or substantially diminish competition for public improvement contracts; and
- (b) Awarding a public improvement contract under the exemption will likely result in substantial cost savings and other substantial benefits to the contracting Agency.

An exemption from low bidding is required to enable TriMet to select its contractors using a competitive RFP process. Under the traditional low bid procurement method, TriMet may consider only price in selecting a contractor. The competitive RFP process allows TriMet to select a contractor upon consideration of many factors, including price. In addition to price, use of the RFP process allows TriMet to consider things such as experience in similar work, schedule performance, cost control, attention to safety, quality of workmanship, and Minority/Women/Emerging Small Business (M/W/ESB) and workforce diversity programs.

The Project will be constructed along an operating light rail line and public transit facility. TriMet has a history of successfully utilizing the RFP process to select contractors for complex construction projects, like this one. For example, the Portland-Milwaukie Light Rail Project utilized RFPs to obtain contractors for the east and west segments of that project, as well as the Center Street Building Modifications work. TriMet also used an RFP process to select a contractor for the Blue Line Station Rehabilitation project, the eFare Installation project, and the Cleveland Crew Room Renovation Signals and Communications Systems project, all of which, like this one, involved work around operating TriMet systems.

Pursuant to ORS 279C.335(5), TriMet is required to hold a public hearing to allow comment on draft findings used to grant an exemption for a public improvement. Notification of the public hearing on the draft findings was published in the Daily Journal of Commerce, and the hearing was held on July 5, 2019. There were no attendees, and no comments were received. The agency's written findings in support of the exemption, which are required by ORS 279C.335, are attached to this Resolution as Exhibit A.

**6. Procurement Process**

Upon approval of this exemption, a competitive RFP process will be used to select the contractors that present the best value to the agency, based on the criteria included in the RFP, including price.

**7. Diversity**

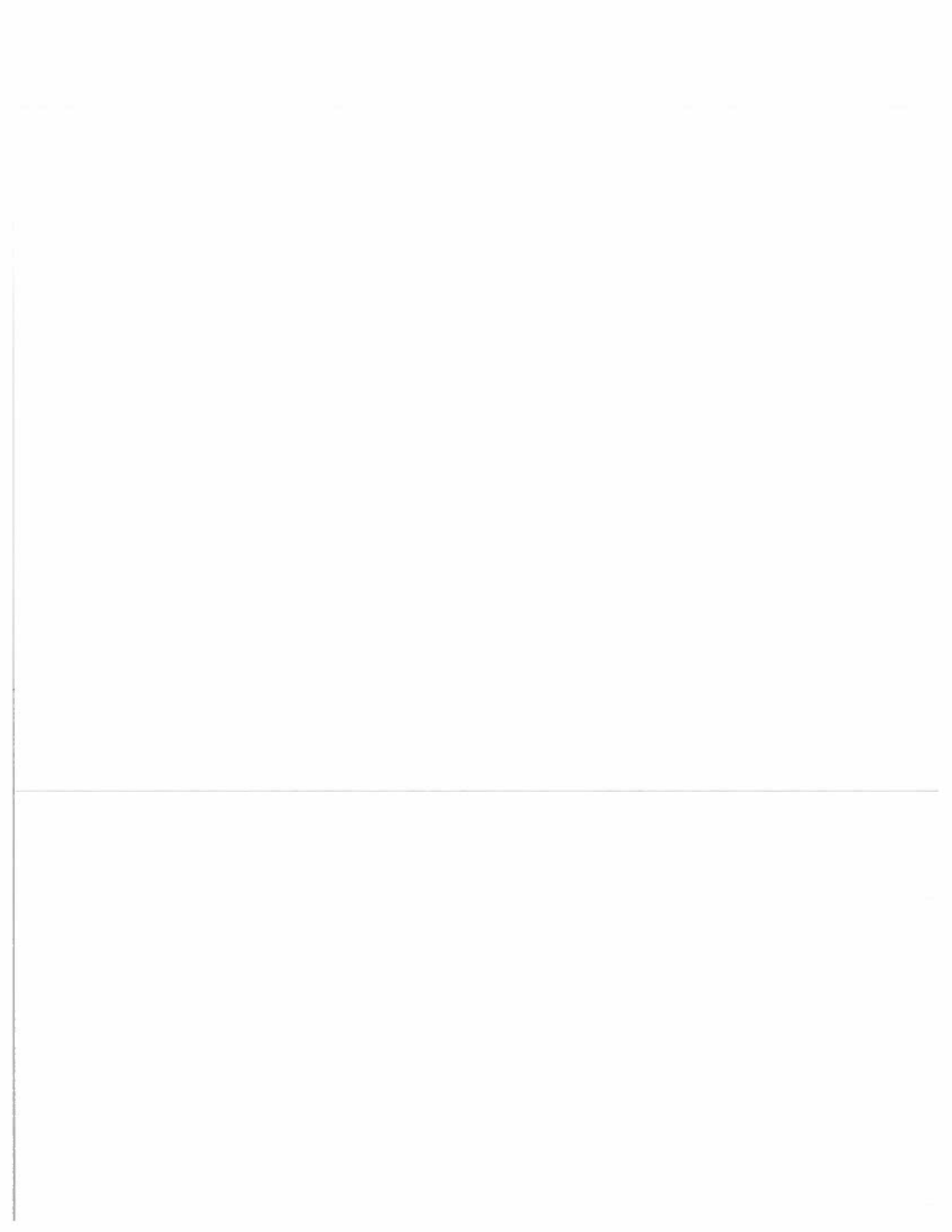
Use of a competitive RFP process allows TriMet to consider proposers' M/W/ESB plans and workforce diversity plans in awarding the contract.

**8. Financial/Budget Impact**

The final amount of work performed on the Project is expected to total approximately \$1,800,000. Funding for the project is through the TriMet general fund and will be included in future fiscal year Engineering and Construction budget requests.

**9. Impact if Not Approved**

If this exemption is not approved, TriMet could procure this public improvement contract through a traditional low-bid procurement method. This is not the preferred option for the reasons outlined above and discussed in the attached findings.



**RESOLUTION NO. 19-07-56**

**RESOLUTION NO. 19-07-56 OF THE TRI-COUNTY METROPOLITAN  
TRANSPORTATION DISTRICT OF OREGON (TRIMET) BOARD OF  
DIRECTORS, ACTING IN ITS CAPACITY AS THE TRIMET CONTRACT  
REVIEW BOARD (TCRB), EXEMPTING FROM COMPETITIVE BIDDING  
REQUIREMENTS A CONTRACT FOR THE STEEL BRIDGE SIGNALS AND  
COMMUNICATIONS SYSTEMS EQUIPMENT PROJECT**

**WHEREAS**, the TriMet Contract Review Board (TCRB) has authority under ORS 279C.335 and TCRB Rule V to exempt a contract from the competitive bidding requirements of ORS Chapter 279C upon approval of written findings submitted by the Agency showing compliance with ORS 279C.335; and

**WHEREAS**, a public hearing was held on the Agency's draft written findings in support of an exemption from competitive bidding requirements for a public improvement contract for construction services for the Steel Bridge Signals and Communications Systems Equipment Project; and

**WHEREAS**, TriMet has submitted to the TCRB its written findings as required by ORS 279C.335 in support of an exemption from competitive bidding requirements for the Project; and

**WHEREAS**, ORS 279C.335(4) and TCRB Rule V(B) provide that in granting exemptions from competitive bidding requirements, the TCRB shall, where appropriate, direct the use of alternate contracting methods that take account of market realities and modern practices and are consistent with the public policy of encouraging competition;

**NOW, THEREFORE, BE IT RESOLVED:**

1. That the TCRB hereby approves and adopts the findings stated at (a) and (b) below, and the Findings In Support of Low Bid Exemption attached as Exhibit A in support of (a) and (b) below, to exempt from competitive bidding requirements the contract for construction services for the Steel Bridge Signals and Communications Systems Project.
  - (a) It is unlikely that the exemption will encourage favoritism in the awarding of public improvement contracts or substantially diminish competition for public improvement contracts; and
  - (b) The awarding of a public improvement contract pursuant to the exemption will likely result in substantial cost savings and other substantial benefits to the agency.
2. That the above-described contract is exempt from the competitive bidding requirements of ORS Chapter 279C.

3. That TriMet is authorized to initiate a Request for Proposal process and negotiate a contract for specified work on the Project, subject to final Board approval of the contract award.

Dated: July 24, 2019

\_\_\_\_\_  
Presiding Officer

Attest:

\_\_\_\_\_  
Recording Secretary

Approved as to Legal Sufficiency:

  
\_\_\_\_\_  
Legal Department

**RESOLUTION NO. 19-07-56  
EXHIBIT A**

**FINDINGS IN SUPPORT OF LOW BID EXEMPTION  
Steel Bridge Signals and Communications Systems Equipment Project**

**A. Competitive Bid Exemption under Oregon Statute**

Oregon law requires all local contracting agency public improvement contracts to be procured by competitive bid unless an exemption is granted by the agency's contract review board or the contract is otherwise exempt from competitive bidding requirements. For a contract review board exemption, ORS 279C.335(2) requires the agency to develop findings that (1) the alternative procurement process is unlikely to encourage favoritism or substantially diminish competition, and that (2) the award of the contract under the exemption will likely result in substantial cost savings to the agency and other substantial benefits to the agency.

In making these findings, the agency must consider the type, cost and amount of the contract and, to the extent applicable to the particular public improvement contract, certain factors defined by ORS 279C.335(2)(b). These include, but are not limited to, the following:

1. How many persons are available to bid;
2. The construction budget and the projected operating costs for the completed public improvement;
3. Public benefits that may result from granting the exemption;
4. Whether value engineering techniques may decrease the cost of the public improvement;
5. The cost and availability of specialized expertise that is necessary for the public improvement;
6. Any likely increases in public safety;
7. Whether granting the exemption may reduce risks to the contracting agency, the state agency or the public that are related to the public improvement;
8. Whether granting the exemption will affect the sources of funding for the public improvement;
9. Whether granting the exemption will better enable the contracting agency to control the impact that market conditions may have on the cost and time necessary to complete the public improvement.
10. If granting the exemption will better enable the contracting agency to better address the size and technical complexity of the public improvement;
11. Whether the public improvement involves new construction or renovates or remodels the existing structure.
12. Whether the public improvement will be occupied or unoccupied during the construction.
13. Whether the public improvement will require a single phase of construction work or multiple phases of construction work to address specific project conditions; and
14. Whether the contracting agency or state agency has, or has retained under contract, and will use contracting agency or state agency personnel, consultants, and legal counsel that have necessary expertise and substantial experience in alternative contracting methods to assist in developing the alternative contracting methods that the contracting agency or state agency will use to award the public improvement contract and to help negotiate, administer, and enforce the terms of the public improvement contract.

## **B. Summary Description of the Steel Bridge Signals System Overhaul**

The Steel Bridge light rail and signaling system began serving the public in 1986 when the original light rail opened for service, as the critical link between Gresham and downtown Portland. Spanning across the Willamette River, the bridge performs multiple functions. The bottom deck carries Union Pacific Railroad (UPRR) cargo trains and includes a separate pedestrian/bike path. The top deck carries public autos on both outside lanes, with exclusive light rail train traffic in the two center lanes. The center section lifts to allow marine traffic to pass below.

The Steel Bridge is central to TriMet's operation, with nearly every light rail line passing across it. To the west, the Blue and Red Lines continue along 1<sup>st</sup> Avenue and Green and Orange Lines continue to 5<sup>th</sup> and 6<sup>th</sup> Avenues. To the east, the Yellow Line extends north and the Blue, Red and Green Lines extend east. The bridge is easily TriMet's most important asset.

Currently, all the logic and programming of this safety critical multimodal asset is accommodated with relay logic and no microprocessors. The new system will incorporate microprocessors across the bridge in cabinets and in a new signals bungalow near the East abutment and will displace many maintenance intensive and hard to access relays, which is the biggest driver of the project.

With the current relay system, maintenance personnel are required attend to relays in each of the four cabinets on the bridge, working within inches of auto and train traffic. Working space on the main deck is very limited. The new updated system will use hardware that requires far less maintenance time, is more reliable and robust, and will allow for better on-time performance. In addition to computing hardware, the new system will incorporate equipment cabinets with vibration mitigation (springs), Supervisory Control and Data Acquisition (SCADA) connections and alarms, air conditioning, and battery backup. The new system will utilize fiber optic and copper cable for communications to allow for a ring that connects both sides of the bridge across the main deck and across the top from tower to tower. If one link breaks down, the ring will allow communications to continue using the other direction of the ring.

Additionally, the new signals bungalow on the east side will allow personnel to troubleshoot most issues from a computer screen from inside and out of the weather. This computer will be connected to the Interstate-Rose Quarter Signal room as well, for continuity and ease of use.

## **C. Critical Factors**

Construction within and adjacent to the operating TriMet light rail system must be conducted with extreme attention to public safety. Designs and cost estimates must take into consideration advanced planning and sequencing to incorporate all the affected agencies: Union Pacific Railroad (UPRR) owns the bridge, Oregon Department of Transportation (ODOT) Rail leases the top deck and the City of Portland and TriMet sublease from it. The Coast Guard governs marine traffic and controls TriMet's waiver for not lifting the top deck during this project.

Furthermore, as this portion of the light rail alignment is extremely active serving all TriMet's light rail lines, it is critical that disruption to operations is minimized during construction. Accordingly, all access and staging alternatives must be carefully developed and evaluated in order to limit impacts.



The demolition of old rail and installation of new rail across the Steel Bridge will also be occurring at the same time as this project. There is very little space for all this construction activity on the bridge and coordination and good communications across contracts, disciplines, and all aforementioned agencies will be critical.

TriMet believes that selection of a contractor with experience and expertise in the design and construction of this type of work will help meet these challenges. The only way to ensure selection of such a contractor is through the use of an alternative selection process.

#### **D. Considerations**

##### *1. Type and Cost of Contract*

TriMet is planning to utilize a negotiated request for proposal (RFP) process (non-low bid) to select a contractor for the Signals Work. TriMet estimates the contract order of magnitude to be approximately \$1,800,000.

##### *2. How many persons are available to bid?*

TriMet believes there is a sufficient market for this type of work and we will use the Daily Journal of Commerce and TriMet's procurement system to notify potential contractors. Furthermore, TriMet believes there will be a specific appetite for this particular contract due to TriMet's recent extensive use of Global Signals Group (Global) in our signals contracts. Global has won several recent contracts with TriMet, including on-call design services, the Cleveland Crew Room Signals project, and the Steel Bridge Signals Design project. Since Global designed this project, they cannot competitively compete for this contract. Therefore, TriMet believes this procurement will provide a valuable opportunity to other signals firms to gain experience with TriMet.

By marketing this opportunity and attempting to notify all known potential respondents, TriMet will implement a process that maximizes the number of available proposers. TriMet has found that by allowing contractors to develop their proposed work plan and to incorporate their value engineering and design ideas into the design and construction of a project, the negotiated procurement process generally encourages significant competition between contractors with accomplished performance records.

##### *3. The construction budget and the projected operating costs for the completed public improvement.*

Selection of a qualified contractor will be based on a number of factors, including experience and cost. In addition, only proposers meeting minimum qualifications will receive the detailed drawings of the signals design. TriMet anticipates competitive and reasonable prices from qualified, experienced contractors.

##### *4. Public benefits that may result from granting the exemption*

The public will benefit directly from a well-planned installation, from a qualified and experienced contractor that completes the project within the allotted time. The Steel Bridge will have a limited term shutdown during which the contractor will remove the old and reinstall the new Signals equipment. The shutdown will cause hardship for the public and the best mitigation effort will be to plan the shutdown well and maintain the plan during construction. An experienced contractor will be more likely to complete the work on time and allow the bridge to resume services as planned.

5. *Whether value engineering techniques may decrease the cost of the public improvement.*  
It has been TriMet's experience that the best and most cost effective value engineering occurs during the design phase. Modifications made long before construction begins system are much more cost effective than ones made within the schedule constraints of construction. As this is a construction contract, TriMet would not expect much value engineering activity.

6. *Cost and availability of specialized expertise that is necessary for the public improvement.*

This project requires personnel with highly specialized experience. TriMet believes that through the RFP process we are most likely to award the contract to the most qualified firm, specific to the skills required. If granted the exemption, TriMet will be able to weigh experience alongside other considerations such as cost and work plan.

7. *Any likely increase in public safety*

TriMet seeks to increase public safety in particular with this type of contract. Train signals are extremely important to public safety in the prevention of catastrophic accidents such as derailments or train-on-train collisions. TriMet believes the low-bid process contains the potential to award the contract to an unqualified contractor who is not experienced in the tradition of train signaling, which started in the early 1800s and has improved over time. The design and installation of vital relays, microprocessors, and software is a skillset of a relatively small niche of qualified professionals.

8. *Whether granting the exemption may reduce risks to the contracting agency or the public that are related to the public improvement.*

Granting this exemption gives TriMet the ability weigh the specific experience required to do this work, which includes light rail signaling experience with a Microlok processor (and associated programming language) within a redundant communications ring surrounding a safety critical mulitmodal interlocking. The associated risk of something going wrong during the project is very real and very serious. With the ability to consider experience level through an alternative contracting means, TriMet can mitigate this risk by considering all competitive proposals based on qualifications along with price.

9. *Whether granting the exemption will affect the sources of funding for the public improvement*

The funding source of this contract is TriMet's general fund, which permits alternative contracting methods.

10. *Whether granting the exemption will better enable the contracting agency to control the impact that market conditions may have on the cost of and time necessary to complete the public improvement*

Due to the amount of light rail construction currently happening on the West Coast, TriMet believes there is risk from limited availability of qualified contractors, and with that comes the risk of unqualified contractors looking for an opportunity. By utilizing an RFP process, TriMet will have the flexibility to mitigate this risk as much as possible.

11. *Whether granting the exemption will better enable the contracting agency to address the size and technical complexity of the public improvement.*

This project will include highly technical work made more complex by the need for integration with the existing system (Interstate Rose Quarter to the east and Irving Tower and A1 House to the west). If allowed this exemption, TriMet can be more selective in seeking contractors able to work in a highly coordinated environment with limited work areas for

multiple contractors. The civil track improvement project is separate in scope, but will be occurring in nearly exactly the same area of the bridge. In addition, TriMet anticipates private auto traffic will continue during the shutdown, which will add to the required coordination efforts.

*12. Whether the public improvement involves new construction or renovates or remodels an existing structure*

This project involves the renovation of very old infrastructure and the incorporation of a large communications network. A solid work plan will be very important to complete the necessary work within the demands of the schedule. Through an RFP process, TriMet can evaluate the work plan along with experience and cost to make an informed decision.

*13. Whether the public improvement will be occupied to unoccupied during construction.*

The Steel Bridge will still be in use by private auto traffic during construction. Combined with the non-signals work, TriMet expects the entire bridge to be extremely busy. Contractor personnel will need to be experienced and well-disciplined, which can be assessed as part of the RFP process.

*14. Whether the public improvement will require a single phase of construction or multiple phases of construction to address specific project conditions.*

Multiple phases of construction are required. All the equipment will be assembled and wired together at a separate facility, most likely outside of Portland. Then the equipment will be tested before being shipped to Portland for installation. The coordination and logistics of this effort will be largely within the purview of the winning contractor, which lends itself to a selection process involving individual work plan evaluation.

*15. Whether the contracting agency or state agency has, or has retained under contract, and will use contracting agency or state agency personnel, consultants, and legal counsel that have necessary expertise and substantial experience in alternative contracting methods to assist in developing the alternative contracting methods that the contracting agency or state agency will use to award the public improvement contract and to help negotiate, administer, and enforce the terms of the public improvement contract.*

TriMet has extensive experience utilizing alternative means of contracting, such as RFP, on projects such as the Banfield Light Rail Track Rehabilitation, the Portland-Milwaukie, Portland Mall, and I-205 Light Rail, the Tilikum Crossing Bridge, and the Park Avenue and Clackamas Town Center Park and Ride.

**E. Findings**

For reasons stated above, TriMet believes a contract procurement strategy not strictly based on price, can be executed without bias or favoritism while still exercising substantial competition. An exemption from the low bid requirement will allow for an improved final product for the public and improved construction coordination between all the necessary agencies and contractors.

