

SOUND TRANSIT

RESOLUTION NO. R98-25

Authorizing the execution of the contract with Bombardier Transit Corporation (Bombardier) for the purchase of passenger rail equipment

BACKGROUND AND COMMENTS

Meeting:	Date:	Type of Action:	Staff Contact:	Phone:
Finance Committee	6/4/98	Recommend Board Approval	Paul W. Price , Commuter Rail Dir.	689-4760
Board of Directors	6/11/98	Approval	Judy Crow, Contract Specialist	689-4796

ACTION:

Approval of Resolution No. R98-25, authorizing the execution of the contract with Bombardier Transit Corporation (Bombardier) for the purchase of passenger rail equipment necessary for the operation of the Tacoma to Seattle commuter rail segment. This contract will supply eighteen (18) cab cars and twenty (20) coaches, training and support manuals, at a cost not to exceed a net base bid price of \$72,651,536, including taxes. Additionally, this resolution authorizes up to \$1,900,000 for spare parts associated with this purchase, resulting in a total contract award amount not to exceed \$74,551,536. An additional \$1,453,030 (2% of the base bid price of \$72,651,536) is requested to be authorized as a contingency reserve to cover work order changes.

The gross base bid price submitted by Bombardier was \$74,183,525. This resolution authorizes a net base bid price of \$72,651,536 which includes the acceptance of three alternate proposals; a), b), and d). Alternate proposal a) reduces the cost of the Bonding by requiring that the performance bond remains for each of the Base Order and the subsequent Option and Orders, in full force and effect only until final acceptance of each vehicle, rather than the entire term of the contract. Because a Maintenance and Guarantee Bond is also required we can thereby receive sufficient protection without redundant bonding coverage. By eliminating this duplication, the gross base bid price is reduced by approximately \$77,677 (includes sales tax).

Alternate proposal b) called for a Maintenance and Guarantee Bond running concurrent with the control warranty of the Car (2 years), vs. the 5-years specified in the Contract documents. By matching the Bond to the control warranty, the base bid price is reduced by approximately \$51,424 (includes sales tax). Alternate proposal d) provides a proposed payment schedule based on specific milestones. A Sound Transit financial review calculated the value of the money and interest earned and compared that analysis with the value of the price reduction proposed. Based on the analysis, alternate d) for payment schedule, reduces the gross base bid price by approximately \$1,402,888 (includes sales tax).

Execution of this contract in June of 1998 will provide for at least six (6) vehicles to be available in December 1999, for service start-up (two 3-car sets), with a continued delivery schedule of approximately five (5) additional vehicles per month, until delivery is completed in the Summer of the year 2000, for the net base bid. The bid also contains options for twenty (20) additional coaches to be awarded by a future Board action, upon FTA approval of Environmental documents for the Tacoma-Lakewood and Seattle-Everett segments, which is expected to occur in the first half of 1999. Options, if exercised, will continue vehicle delivery until June 2001 for the Lakewood-Tacoma and Seattle-Everett segments. This results in an approximate total contract price of \$111,431,120 and a contingency amount of \$2,220,000.

BACKGROUND:

As described in *Sound Move*, the commuter rail component, the *Sounder*, has an expected operational start-up of service in December of 1999. To meet this goal, the staff has been directed by the Board to develop specifications and go out to bid for *Sounder* rail cars and locomotives. At this Board meeting, the rail cars are before the Board for action. This bid is for cab cars and coaches based on a low floor, bi-level, high capacity (140 seats per car) criteria, as discussed by the Board in October of 1997.

Cab cars and coaches are essentially identical except that a cab car contains an Engineers' Station so that the train can be operated in a push-pull mode. That is, in one direction, the Engineer is in the locomotive (pull mode), operating the train. When reversing directions at the end of the line, the Engineer operates the train from the cab car (push mode).

To develop the specifications, Sound Transit hired Raul V. Bravo and Associates, Inc., (RVB) as our technical assistants. Mr. Bravo updated and broadened the specification to allow recent entries into the commuter rail market an opportunity to compete with a proven product. After modification by Mr. Bravo, the specification was authorized to be released for bidding by the Executive Committee of the Board in February of 1998.

BID PROCESS:

This procurement process consisted of several steps. Consultant services were procured for the purpose of developing the technical specifications. A Request for Qualifications/Proposals entitled Request for Qualifications and Proposal for Consulting Services to Refine Public Domain Commuter Rail Vehicle Specifications, RFQ/RFP No. RTA/CR 27-97 was publicly advertised. Six (6) proposals were received on October 13, 1997.

The firm of Raul V. Bravo & Associates (RVB) was selected. One of the reasons that RVB was selected was because that firm has a broad breadth of experience with transit rail operations and a variety of rail vehicle manufacturers. One other company did not have this breadth of experience, but had experience that was generally limited to Bombardier. The selection panel wanted a broader breadth of experience so that it could be assured that the technical specifications would be unbiased and would not be focusing on any one particular vehicle manufacturer.

RVB began their work by compiling the documents required to be reviewed and evaluated. This included the technical specifications for the passenger coaches and cab cars, which were provided to the Sound Transit by North San Diego County Transit District, MTA/Los Angeles, Caltrans, Chicago METRA and Massachusetts Bay Transportation Authority.

RVB revised the public domain documents by doing the following:

- specify a bi-level, low-floor vehicle which was proven in revenue service;
- specify a vehicle that provide optimum passenger flow to reduce dwell (wait) times at stations;
- specify a vehicle with a minimum of two large doors per side;
- specify a vehicle with intercar passageways which would permit passengers to transfer into a standard single level passenger rail car;
- specify a high capacity vehicle;
- specify a vehicle of optimum weight, as related to performance and overall life cycle costs;
- specify a vehicle that is fully compliant with all applicable rules, regulations and industry recommended practices, including certain proposed rules under consideration by the Federal Railroad Administration;
- specify a vehicle on which tickets will not be necessarily collected on-board;
- open as many technical characteristics and performance requirements as possible to enhance bidder's participation.

RVB also assessed market conditions. They concluded that approximately four manufacturers, namely Kawasaki, Bombardier, Nippon-Sharyo and GEC Alsthom, were potential bidders and that the current market conditions were favorable to obtaining competitive bids.

RVB reviewed the contract terms and conditions that Sound Transit staff had prepared. RVB recommended that certain modifications be made to the Contract Documents in order to reduce costs and expand the potential for receiving multiple bidders.

An advertisement was placed in the rail industry trade journal on January 26, 1998, announcing that Sound Transit was soliciting Letters of Interest from companies capable of providing commuter rail vehicles. We received nine (9) letters of Interest. Everyone who submitted a Letter of Interest was sent an Invitation for Bid.

Prior to distributing the Invitation For Bid (IFB) to the public, Sound Transit staff met with the Federal Transit Administration (FTA) for the purpose of reviewing the document for compliance with federal requirements. The FTA expressed no concern that the document somehow violated federal requirements or was in any way improper.

The document was publicly advertised and distributed at the cost of \$100. Eleven copies of the document were distributed.

The IFB document included Sections 1-7, 1-9 and 1-10, which allowed prospective bidders to ask questions of clarification by submitting a Request for Information (RFI) on the prescribed form.

The Sound Transit would, in accordance with the Contract Documents, respond to these RFI's via written Addenda. Staff received 187 RFI's which asked a variety of questions regarding the technical specifications and the contract terms and conditions. Many changes were made to the Contract Documents to respond to the RFI's. In most instances, requirements that were considered by some prospective bidders as being onerous or inequitable were modified.

One of the RFI's requested that prospective bidders be allowed to ask follow-up questions to the Sound Transit's responses to the RFI's. We provided this opportunity and accepted a second set of RFI's. Further, the bid submission date was extended by two weeks to allow extra time for potential bidders to prepare their bids.

BID:

Bids were opened on May 20, 1998. Only one bid, from Bombardier Transit Corporation, was received. The gross base bid price was \$74,183,525 for the cab cars and coaches, which is inclusive of pre-manufacture plan, sales tax, delivery, training and technical support. The bid also included up to an additional \$1,900,000 for spare parts, which brought the total award to \$76,083,525.

As only one bid was received, Sound Transit undertook a bid analysis, using expertise from King County Metro (Steve Policar), Raul V. Bravo and Associates, Inc., and Sound Transit financial staff expertise. The FTA calls for this analysis should a single bid be received on a federal project. As a result of the analysis and recommended acceptance of alternate proposals a), b) and d), the recommended award is for \$72,651,536, plus \$1,900,000 for spare parts, for a total of \$74,551,536, and a contingency of \$1,453,030 (2% of the net base bid price of \$72,651,536).

BID ANALYSIS:

Table I (see attachment) was developed to assist in the first phase analysis of the bid. Sound Transit staff developed a matrix of the four most recent United States Bombardier rail car procurements, and recent Kawasaki and GEC/Alsthom bids.. By using the All Urban Consumers CPI, all procurements were converted from year of expenditure dollars to 1998 dollars. These were then compared to the bid quoted to Sound Transit. On average, the coaches, adjusted for inflation, were \$76,982 per unit more and the cab cars were \$123,817 per unit more for the Sound Transit bid, based on the non-adjusted base bid of \$74,183,525.

The next step was to evaluate cost drivers that make up for the disparity between recent bids and Sound Transit's bid. These disparity drivers can be divided into four components: 1) Contract provision variations; 2) Additional amenities desired by Sound Transit; 3) Pending Federal Railroad Administration (FRA) crash-worthiness standards, and; 4) Federal government stricter "Buy America" provisions. It should be noted that Items 1. and 2. are items over which there is discretion and modifications can be made. Item 3. could be deleted, as vehicle procurements awarded prior to issuance of the new rule are exempt. However, this is an important item of safety and concern to labor and industry. Labor has been particularly interested in these new design standards and staff believes the cost is small for the safety and security offered. Item 4. cannot be deleted without foregoing the option of receiving federal funds for the *Sounder* project. The impact of each of these components is analyzed below.

1. Contract Provisions Variations: Sound Transit's bid calls for progress payments upon certain milestones on a very traditional and conservative basis. This requires the manufacturers to cover the cost of the parts and materials with a commercial loan application. The three California properties made advance payments to Bombardier to reduce the cost per unit, by providing up-front cash which allowed Bombardier to reduce its commercial loan costs. Bombardier, Corporation has proposed to Sound Transit that they would reduce the price \$4,013,000 or \$105,605 per unit, if Sound Transit were to use the Southern California Regional Rail Authorities (SCRRA) payment schedule. However, unlike California, Sound Transit 's money earns interest for the longer period of time held. Staff is analyzing whether these proposed savings weigh out against interest earnings lost.
2. Additional Amenities Desired by Sound Transit: Sound Transit made some specific enhancements to features that went beyond current state-of-the-art for this type of commuter car. First, an overhead luggage rack was added. This required new lighting design, new air circulation design, and new structural support design into the sidewalls. Secondly, the cars are plumbed for future food service capabilities. Third, a new electrical system was specified to provide power to lap top computers. Our engineers estimate that the cost of these amenities is approximately \$50,000 per unit.
3. Pending Federal Rail Administration (FRA) Crash-Worthiness Standards: Over the past two years, the FRA has been developing new standards to increase the safety and integrity of rail cars. The draft standards have been reviewed, and are soon to be released. Sound Transit incorporated these new standards into the specifications. This was accomplished with the assistance of APTA, Raul Bravo and Associates, Inc., and Dale Jeremiah (Brotherhood of Locomotive Engineers). The estimated cost of this modification is \$25,000 per unit (cab car only).
4. Federal Government's Stricter "Buy America" Provisions: Under new federal procurements, rail car purchases must meet strict "Buy America" provisions. These provisions control the product quantity of United States-made components and finishes. Up to this time, Bombardier's commuter rail cars were final-assembled in Thunder Bay, Canada. The "Buy America" provision will require that assembly be completed in the Bombardier plant in Barre, Vermont. It is estimated that the cost of the "Buy America" provision is approximately \$25,000 per unit.

Therefore, by way of a more accurate comparison, if Sound Transit were to adopt the SCRRA payment schedule, eliminate desired amenities, delete the new crash-worthiness standards, and not be required to abide by the "Buy America" provision, the price per cab car could be reduced \$205,605, and coaches by \$180,605. As a

result of this analysis, as well as comparison with other previous competitive procurements, staff believes this bid compares very favorably with the industry market prices.

M/W/DBE:

National and International equipment suppliers meet goals established through national agreements filed with the Federal Transit Administration (FTA). Such firms must certify that they are in compliance with their plans. Attached is Exhibit A for reference on this subject.

FUNDING:

The *Sound Move* 1995 budget for commuter rail equipment was \$144,000,000. The base bid plus options for Seattle to Everett and Tacoma to Lakewood will total \$111,431,120. Locomotives are still in negotiations, but are expected to cost \$25-\$28 million. This totals approximately \$136.5 million to \$139.5 million.

ALTERNATIVES:

The Board may do one of the following:

1. Authorize signature of the Contract;
2. Re-bid project with longer delivery times (substantial delivery delay of 1-3 years);
3. Throw out all bids and negotiate a contract through a performance specification process (substantial delivery delay of 1-3 years); and
4. Terminate project.

CONSEQUENCES OF DELAY:

Currently, in direct week-for-week start-time delay if the contract is not signed, nor the Notice to Proceed issued in June 1998.

RELEVANT BOARD POLICIES AND PREVIOUS ACTIONS TAKEN:

- *Sound Move* (Adopted May 31, 1996)
- Board vehicle type-direction of October 1997.
- Executive Committees' release of specifications for bid – February 1998.
- Implementation Guide Adopted, June 12, 1997 (Motion No. 32)
- Commuter Action Plan, presented at Board Meeting July 24, 1997

KEY FEATURES:

- A cost/price analysis has been performed, as required by the FTA, to ensure that the contract prices charged by Bombardier are fair and reasonable.
- A "Buy-America" pre-award audit, as required by the FTA, has been conducted. Bombardier has been found to be in compliance with Buy America requirements.

- Authorize award of contract for thirty-eight (38) cab cars and coaches for Tacoma-Seattle *Souder* segment.
- Options for additional twenty (20) coaches for Seattle-to-Everett and Tacoma to Lakewood segments, upon future Board action.
- Within Adopted Budget.
- Allows for late 1999 Start-up.
- DBE issues for transit vehicle manufacturers (TVM) are administered directly with the FTA, not with Sound Transit. Each TVM is required to achieve a DBE goal with is determined by the FTA. Typically 5-10% DBE participation is achieved.
- The Contract Documents provides for a Pre-Manufacture Planning Period, where in various products related to the proper planning and management of the project are submitted by the Contractor and reviewed by Sound Transit. These items include: shop drawings, schedules, quality assurance plans, etc. this process helps insure that major issues are resolved before the commencement of the manufacture process, thereby reducing the potential for change orders.
- The Pre-Manufacture Planning process also provides for a discussion of the use of local and small businesses.
- The Contract Documents require a Maintenance and Guarantee Bond in the amount of 20% of the Total Contract Price for a period of 5 years. The Contractor has made a value engineering proposal that we reduce the period of this security to 2 years, which would result in cost savings of \$51,425. Staff recommends this proposal.
- The Contractor has proposed, in accordance with the Contract Documents, several progress payment schedules that, if accepted, may reduce the cost of financing the vehicle manufacture process. The Contractor is willing to pass these savings on to Sound Transit. Staff has reviewed these proposals and has proposed acceptance of alternate proposal d) which reduces the price \$1,453,000 (includes sales tax).
- Retainage in the amount of 5% will be held from each progress payment made.
- A warranty period of 2 years will be provided.
- The scope of work includes training, spare parts, Operating & Maintenance manuals and other appurtenances necessary for the operation and maintenance of the vehicles.
- The contract allows Sound Transit to assign this contract to other jurisdictions that may which to purchase the same vehicles. This is a process which was encouraged by the FTA, for the purpose of reducing overhead, administration and procurement costs.
- The Contract Documents provide for performance security in the amount of 50% of the value of the cars.

SOUND TRANSIT

RESOLUTION NO. R98-25

A RESOLUTION of the Board of the Central Puget Sound Regional Transit Authority authorizing the Executive Director to execute the contract with Bombardier Transit Corporation (Bombardier) for the purchase of passenger rail equipment necessary for the operation of the Tacoma to Seattle commuter rail segment. This contract will supply eighteen (18) cab cars and twenty (20) coaches, training and support manuals, at a cost not to exceed a net base bid price of \$72,651,536, including taxes. Additionally, this resolution authorizes up to \$1,900,000 for spare parts associated with this purchase, resulting in a total contract award amount not to exceed \$74,551,536. An additional \$1,453,030 (2% of the base bid price of \$72,651,536) is requested to be authorized as a contingency reserve to cover work order changes.

WHEREAS, a Regional Transit Authority ("Sound Transit") has been created for the Pierce, King, and Snohomish County region by action of their respective county councils pursuant to RCW 81.112.030; and

WHEREAS, on November 5, 1996, Central Puget Sound area voters approved local funding for *Sound Move*, the ten-year plan for regional high-capacity transit in the Central Puget Sound Region; and

WHEREAS, *Sound Move* included funding a commuter rail component consisting of designated segments; and

WHEREAS, *Sound Move* established an expected operational startup date of December 1999 for commuter rail service on the Seattle-to-Tacoma segment; and

WHEREAS, *Sound Move* includes funding for implementation of the Seattle-to-Tacoma commuter rail segment; and

WHEREAS, the Seattle-to-Tacoma commuter rail service is expected to be implemented along existing Burlington Northern & Santa Fe railroad freight lines; and

WHEREAS, it is necessary to procure cab cars and coaches in order for Sound Transit to implement the commuter rail service; and

WHEREAS, Sound Transit has developed design specifications for low floor, bi-level, high capacity cab cars and coaches with enhancement features including air circulation, structural support and electrical designs, and future food service capability; and

WHEREAS, after developing the specifications and prior to soliciting bid proposals Sound Transit determined that the bid documents were in compliance the Federal Transit Administration requirements; and

WHEREAS, Sound Transit solicited bid proposals from competing rail coach and cab car manufacturers based upon the specifications; and

WHEREAS, Sound Transit conducted a cost and price analysis, pursuant to FTA guidelines, of the contract price submitted by Bombardier Transit Corporation (“Bombardier”), the successful bidder, and determined that the fees and costs proposed to be charged by Bombardier are fair and reasonable; and

WHEREAS the Federal Transit Administration has issued a “Finding of No Significant Impact” (FONSI) on the Seattle-to-Tacoma commuter rail line; and


WHEREAS, Sound Transit has issued a Mitigated Determination of Nonsignificance in compliance with the State Environmental Policy Act; and

WHEREAS, it is in the best interest of Sound Transit to procure cab cars and rail coaches from Bombardier utilizing the design specifications and utilizing the base contract terms, conditions, and warranties negotiated therewith:

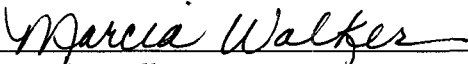
NOW, THEREFORE, BE IT RESOLVED by the Board of the Central Puget Sound Regional Transit Authority as follows:

The Executive Director is hereby authorized to execute a contract with Bombardier Transit Corporation (Bombardier) for the purchase of passenger rail equipment necessary for the operation of the Tacoma to Seattle commuter rail segment. This contract will supply eighteen (18) cab cars and twenty (20) coaches, training and support manuals, at a cost not to exceed a net base bid price of \$72,651,536, including taxes. Additionally, this resolution authorizes up to \$1,900,000 for spare parts associated with this purchase, resulting in a total contract award amount not to exceed \$74,551,536. An additional \$1,453,030 (2% of the base bid price of \$72,651,536) is authorized as a contingency reserve to cover work order changes.

ADOPTED by the Board of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on the 11th day of June, 1998.


Bob Drewel
Board Chair

ATTEST:


Marcia Walker
Board Administrator