ANALYSIS OF INTERSTATE 405 TRAFFIC DATA AND PERFORMANCE MEASURES, AND RECOMMENDATIONS TO IMPROVE CORRIDOR PERFORMANCE

I. BACKGROUND

The Washington State Legislature is seeking an independent analysis of traffic data for the express toll lanes and general-purpose lanes of the Interstate 405 tolled corridor, including the performance measures described in RCW 47.56.880, and the development of recommendations for near-term and longer-term strategies to improve traffic performance in the corridor.

This assignment is described and authorized in the 2017 Transportation Budget Bill, ESB 5096, Section 204(2). The Legislature has provided $160,000 for this study. A final report is due January 8, 2018.

Reason for the study

The main driver for this study is the Legislature’s desire for an independent, non-biased analysis of the traffic data for the express toll lanes and general-purpose lanes of the I-405 tolled corridor.

The Legislature has requested WSDOT augment its reporting on the performance of the corridor. WSDOT has used averages in the past to describe the function of the entire corridor, and while on average more people are moving through the facility faster than before, those averages may not reflect the experience of many of the users along particular segments of the corridor. At times, legislators have expressed frustration due to a perceived disconnect between what WSDOT has reported about the corridor’s performance, and what their constituents have expressed to them.

Interstate 405 corridor

I-405 is one of the most congested corridors in the country, one that the Washington State Department of Transportation (WSDOT) and the Legislature have been working for years to address. Tax increases in 2003 and 2005 provided $1.5 billion for the corridor, and the 2015 tax increase earmarked another $1.3 billion. Yet the problem remains. Population is booming in the area, so despite these investments, even more vehicles are using the facility and congestion remains.

Following is a map of the facility, the program for which is described on WSDOT's website.
Express toll lanes

Unpredictable commute times during peak hours on I-405 and increasing congestion that impeded bus transit led lawmakers in 2011 to authorize WSDOT to build a system of express toll lanes. This initial phase of ETLs would run on a 17-mile stretch between Bellevue in the south and Lynnwood in the north. The project included one new ETL paved in each direction from Bellevue to Bothell, and converting the old HOV lanes from Bellevue to Lynnwood. This resulted in two ETLs each direction Bellevue-Bothell, and one each way Bothell-Lynnwood.

The goal was to provide drivers a choice for a faster, more reliable trip on I-405. As stated in statutory performance measures, another goal is for the ETLs to maintain speeds of 45 mph at least 90% of the time; this goal is one of two performance measures that the facility must meet or else state law requires termination of the ETLs after a two-year pilot project that ends on September 27, 2017.

The Washington State Transportation Commission sets tolls in Washington, and for the I-405 facility, after analyzing extensive traffic, performance and population growth data, they set a minimum of 75 cents and a maximum of $10. Tolling in the ETLs is dynamic; electronic signs post the toll rate based on destination and automatically adjust depending on real-time traffic conditions. As more vehicles enter or exit the lanes at designated access points, toll rates adjust to try to keep traffic moving at least 45 miles per hour in the ETL. Toll rates are based on speeds and traffic volumes in the ETLs, and take into account volumes in the general-purpose lanes.

The ETLs opened to traffic on September 27, 2015.

On opening, 3+ HOVs with a Flex Pass transponder drove for free in the ETLs at all times. 2+ HOVs paid to drive in the ETLs only during peak hours (5AM - 9AM, 3PM - 7PM), Monday through Friday. Solo drivers paid to drive in the ETLs at all times. The Commission changed that policy in March, 2016, to allow all vehicles to drive toll-free during weekday evenings (7 PM - 5AM). In addition, the lanes became toll-free for everyone on weekends and six major federal holidays.

Early experience in the express toll lanes

The $10 maximum toll was predicted to be rare, but by December of 2015, drivers paid $10 more frequently than expected. WSDOT’s data showed that while traffic improved in the southern part of the corridor, it slowed in general-purpose lanes in the Bothell area and at points north of SR 522 – the area where only one ETL was added. WSDOT reported that the additional northbound capacity in the southern portion of the project moved some of the worst congestion north, from Kirkland to Bothell. Tollpayers and buses were saving up to 14 minutes in the morning. Southbound general-purpose traffic saved time in the morning, but evening northbound traffic was delayed through Bothell.

Delays actually worsened on weekends and afternoon commutes going north through Bothell. A local legislator reported to his colleagues that slowdowns starting showing up on Saturdays from 11AM – 4:30 PM at the I-405 junction at SR 522 – a location where he said slowdowns rarely occurred before the opening of the express toll lanes.

2016 legislative session

As the Legislature convened in 2016, legislator filed bills to repeal or change the express toll lane system.

In January 2016, the Senate Transportation Committee held a public hearing on SB 6152, which would restrict WSDOT to operating only a single express toll lane in each direction and remove tolls on evenings and weekends. The 60-minute public hearing is linked below, and includes a number of the questions and challenges that were raised. The Committee amended and approved the bill on February 2; as amended, it did
not restrict the number of ETLs, but it did direct that the facility be toll-free on evenings, weekends, and state or federal holidays. The bill did not pass the Legislature.

**SB 6152, public hearing 1.14.16, passed committee 2.2.16 (60 min on 1.14.16)**

https://www.tvw.org/watch/?eventID=2016010084

The House Transportation Committee held a work session on the I-405 express toll lanes on January 28, 2016, and heard presentations from WSDOT; Dr. Mark Hallenbeck, the director of the Washington State Transportation Center at the University of Washington; and David Hablewitz, a citizen who has collected 30,000 signatures on a “stop 405 tolls” petition. Among other topics, they discussed data, differences in data, what different data measure, data shortcomings, etc.

**1.28.16 HTC work session – 80 min. Starts at beginning of the hearing**

https://www.tvw.org/watch/?eventID=2016010356

Key take-aways from the work session include the following:

- Data does not always match an individual’s experience on the road
- WSDOT’s data describes averages on the corridor. Not every day is an average day.
- A driver’s experience depends on where the driver is on the corridor.
- The method of data collection matters. INRIX collected data using cell phones, and they reached different conclusions about the operations of the corridor than did WSDOT. WSDOT asked the University of Washington’s Washington State Transportation Center (TRAC) to analyze the INRIX data and explain differences from WSDOT’s data.

Presentations from that work session:

- [WSDOT’s I-405 Express Toll Lanes Performance Update](https://www.tvw.org/watch/?eventID=2016010356)
- [Mark Hallenbeck Review of I-405 Data and Reporting](https://www.tvw.org/watch/?eventID=2016010356)
- [David Hablewitz’s "Stop I-405 Tolls" presentation](https://www.tvw.org/watch/?eventID=2016010356)

During the work session, a legislator referenced an analysis prepared by the Washington Policy Center, which is found [here](https://www.tvw.org/watch/?eventID=2016010356).

**Facility changes after the 2016 legislative session**

In response to direction from the Legislature and the Governor, the Transportation Commission took action in March 2016 to cancel nighttime, weekend and some federal holiday tolls in the ETLs.

The Legislature also funded a study of shoulder hardening along the corridor in the northbound direction between SR 527 and I-5, and adding a northbound auxiliary lane in Kirkland between SR 520 and NE 70th Place-- at a cost of $26.5 million. In August of 2016, the $11.5 million shoulder-hardening project got underway, using toll dollars to convert 1.8 miles of shoulder north of the SR 527 on-ramp to hard shoulder, open to traffic during peak travel times. It opened to traffic in April, 2017.

In December 2016, the Joint Transportation Committee held a work session on I-405 express toll lanes. David Ungemah from Parsons Brinckerhoff’s Denver office made a presentation describing the national experience with express toll lanes. Patty Rubstello, WSDOT’s Assistant Secretary for the Toll Division, then provided an I-405 express toll lane performance update.
2017 legislative session

Legislators from both houses introduced additional legislation in 2017 seeking to stop tolling on the express toll lanes, but neither bill was voted on in committee.

A story by staff writer Mike Lindblom appeared in the February 3, 2017, Seattle Times, summarizing drivers’ ETL experience in the first full year of operations. He reached the following conclusions:

- Even drivers who don’t use the toll lanes save an average of 5 minutes on the 17 mile trip from Lynnwood to Bellevue
- The facility serves more people than ever before
- 51,000 drivers per day use the toll lanes, saving an average 11 minutes southbound and 14 minutes northbound at peak times compared with general-purpose lanes
- Transit agencies say ridership is growing as buses in ETLs spend less time in traffic
- During the first year of I-405 ETLs:
  - WSDOT collected $15.6 million after operating expenses – triple what was expected. By law, that money must be reinvested in I-405.
  - Tolls hit the maximum of $10 for at least a few minutes on 55% of commute days.
  - Peak time drivers saved an average of 14 minutes if they traveled from Lynnwood to Bellevue.
  - General-purpose lane speeds were faster through Kirkland, but the time savings vanished for northbound drivers in Bothell.
  - Among Flex Pass holders, 82% used toll lanes 10 or fewer times a month. Between 50,000 and 70,000 drivers a month were first-time users.

On February 15, 2017, the Senate Transportation Committee held a public hearing on SB 5707, which sought to repeal the express toll lanes. The Committee meeting opened with the 30-minute public hearing, and can be viewed here. During the hearing, WSDOT’s Patty Rubstello provided data on the first 15 months of operations saying more vehicles are moving in the ETLs than in the prior HOV lanes and improvements are speeding up commutes for the majority of drivers, while legislators described much different and unpleasant driver experiences. Individual driver perceptions and WSDOT data do not match.

As of this writing, the bill has not passed the Legislature.

Reason for the study

The main driver for this study is the Legislature’s desire for an independent, non-biased analysis of the traffic data for the express toll lanes and general-purpose lanes of the I-405 tolled corridor.

The Legislature has requested WSDOT augment its reporting on the performance of the corridor. WSDOT has used averages in the past to describe the function of the entire corridor, and while on average more people are moving through the facility faster than before, those averages may not reflect the experience of many of the users along particular segments of the corridor. At times, legislators have expressed frustration due to a perceived disconnect between what WSDOT has reported about the corridor’s performance, and what their constituents have expressed to them.

The goal of the study is to provide an independent and objective analysis that describes performance on various segments of the corridor that represent segments used by typical drivers, and to describe where the corridor is working, and where it is not working.

In 2016, in response to the Legislature’s frustration with WSDOT’s presentation of data, ESHB 2524 directed WSDOT to prepare quarterly reports as described below (this is the language from the 2016 supplemental
transportation budget, ESHB 2524, Section 209(7)). This is an example of the granular level of detail the Legislature is interested in.

(7) The department must provide quarterly reports to the transportation committees of the legislature on the Interstate 405 express toll lane project performance measures listed in RCW 47.56.880(4). These reports must include:

(a) Information on the travel times and travel time reliability (at a minimum, average and 90th percentile travel times) maintained during peak and nonpeak periods in the express toll lanes and general-purpose lanes for both the entire corridor and commonly made trips in the corridor including, but not limited to, northbound from Bellevue to Rose Hill, state route number 520 at NE 148th to Interstate 405 at state route number 522, Bellevue to Bothell (both NE 8th to state route number 522 and NE 8th to state route number 527), and a trip internal to the corridor (such as NE 85th to NE 160th) and similar southbound trips;

(b) A month-to-month comparison of travel times and travel time reliability for the entire corridor and commonly made trips in the corridor as specified in (a) of this subsection since implementation of the express toll lanes and, to the extent available, a comparison to the travel times and travel time reliability prior to implementation of the express toll lanes;

(c) Total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane (i) compared to total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane, on this segment of Interstate 405 prior to implementation of the express toll lanes and (ii) compared to total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane, from month to month since implementation of the express toll lanes.

This is a link to WSDOT’s I-405 Express Toll Lanes Financial and Performance Reports. The most recent report (one year of operations) was written to comply with the direction provided above.
II. SCOPE OF WORK

The purpose of the study is as follows:

- To conduct an independent and objective analysis of traffic data for the express toll lanes and general-purpose lanes of the Interstate 405 tolled corridor,
- To analyze performance of the corridor in terms identified by the Consultant, as well as according to performance measures described in RCW 47.56.880, and
- To develop recommendations for near-term and longer-term strategies for the improvement of traffic performance in this corridor

Staff Workgroup. The JTC will form a Staff Workgroup to provide support during the study. The Staff Workgroup will be comprised of approximately a dozen staff members from the JTC, the House and Senate Transportation Committees, the Transportation Commission, WSDOT, and the Governor’s Office of Financial Management.

TASKS TO BE COMPLETED IN STUDY

The description of tasks below is not intended to fully encompass the study tasks, but instead includes the minimum requirements, in order to provide the Consultant with a framework for the study. The Consultant is strongly encouraged to recommend additions and/or alternatives to better accomplish the study’s objectives.

The four legislators who comprise the Joint Transportation Committee’s Executive Committee are the Legislature’s transportation experts. The Consultant may find it informative to interview these legislators and perhaps others in the 405 corridor at the commencement of the study to gain insight into their concerns leading to this study. The JTC Project Manager also will arrange conference calls with the Executive Committee and Consultant throughout the study to provide updates and gather feedback, as needed.

TASK 1: CONDUCT AN INDEPENDENT ANALYSIS OF TRAFFIC DATA FOR THE EXPRESS TOLL LANES AND GENERAL-PURPOSE LANES OF THE I-405 TOLLED CORRIDOR

The goal of this Task is to provide an independent and objective analysis that describes performance on the tolled corridor, and on various segments of the corridor that represent segments used by typical drivers. Describe where the corridor is working, and where it is not working.

Below are some metrics that the Consultant may consider using in their analysis, but other methodologies and frameworks are also encouraged. This is the granular type of information that is of interest, but it is not the only information desired. The Consultant should design and develop the analysis in a manner the Consultant deems appropriate.

The Consultant is strongly encouraged to analyze the accuracy, utility, and limitations of both WSDOT data and other data independently collected as part of this study.

1) Information on the travel times and travel time reliability (at a minimum, the average and the 90th percentile travel times) maintained during peak and nonpeak periods in the express toll lanes and in the general-purpose lanes for both the entire corridor and commonly made trips in the corridor. These commonly made trips include but are not limited to the following:
a) Northbound from Bellevue to Rose Hill;
b) State Route 520 at NE 148th to Interstate 405 at State Route 522;
c) Bellevue to Bothell (both NE 8th to State Route 522 and NE 8th to State Route 527);
d) A trip internal to the corridor (such as NE 85th to NE 160th); and
e) Similar southbound trips.

2) A month-to-month comparison of travel times and travel time reliability for the entire corridor and commonly made trips in the corridor as specified in (1) above since implementation of the express toll lanes and, to the extent available, a comparison to the travel times and travel time reliability prior to implementation of the express toll lanes.

3) Total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane

   a) Compared to total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane, on this segment of Interstate 405 prior to implementation of the express toll lanes, and
   b) Compared to total express toll lane and total general-purpose lane traffic volumes, as well as per lane traffic volumes for each type of lane, from month to month since implementation of the express toll lanes.

Deliverable: White paper and PowerPoint presentation; all raw and summarized data collected for this task, in a format that can be manipulated, tested and replicated; and a description of the methodology used in conducting the analyses including statistical and sampling analyses.

**TASK 2: ANALYZE PERFORMANCE IN THE CORRIDOR**

[RCW 47.56.880](#) outlines seven statutory performance measures for the I-405 ETL facility. These performance measures are rather general and reflect the use of the entire corridor. As part of Task 2, the Consultant will analyze the performance of the corridor according to these performance measures, and propose and measure other performance criteria to provide a well-rounded and useful description of the facility as a whole, and at key locations throughout the corridor. Task 2 will contribute to the development of the strategies outlined in Task 3 below.

Deliverable: White paper and PowerPoint presentation, including identification of performance metrics developed as part of the study; an analysis of WSDOT’s performance metrics; and a description of the methodology used in conducting the analyses including statistical and sampling analyses.

**TASK 3: DEVELOP RECOMMENDATIONS TO IMPROVE TRAFFIC PERFORMANCE IN THE CORRIDOR**

In Task 3, the Consultant shall develop recommendations for near-term and longer-term strategies for the improvement of traffic performance in this corridor, and along key underperforming segments of it. As part of this Task, the Consultant shall evaluate the following, in addition to any other opportunities for improvement the Consultant may deem feasible:
• Changes to toll rate setting and the dynamic rate-setting algorithms;
• Changes to lane designations and restrictions;
• Various combinations of lane types for this corridor, i.e., ETL, HOV lanes, and general purpose lanes, including proposing the optimal combination of lane types based on current and near-term roadway capacity and the likely optimal combination of lane types in the context of future plans for the corridor; and
• an all-general-purpose-lane alternative for the currently-tolled corridor.

The Consultant shall state any assumptions made regarding operational and capacity improvements in the corridor for each evaluated scenario. To the extent feasible, recommended strategies should address how they could be impacted by the timing of operational and capacity improvements in the corridor. Recommended strategies should also include the impacts on bus transit in the corridor to the extent this can be determined.

Deliverable: White paper

**TASK 4: WORK WITH STAFF WORKGROUP**

**Staff Workgroup.** The JTC will appoint a Staff Workgroup comprised of approximately a dozen staff members from the JTC, House and Senate Transportation Committees, the Transportation Commission, WSDOT and the Office of Financial Management. The Staff Workgroup will provide support during the study.

The Consultant shall work with the JTC Project Manager to identify appropriate roles and participation for the Staff Workgroup.

The Consultant will hold periodic conference calls with the Staff Workgroup, tentatively scheduled for June, July, September and October.

**TASK 5: PRESENTATIONS**

The Consultant will present the draft report to the Joint Transportation Committee at its December 14, 2017, meeting in Olympia.

The House and Senate Transportation Committees may ask the Consultant to present its findings and recommendations in January 2018, and if the $160,000 allotted for this study has already been spent, the JTC will pay the associated travel expenses.

**TASK 6: DRAFT AND FINAL REPORTS**

The Consultant will prepare a draft and a draft final report of the study, which shall include all study findings and recommendations, as well as the deliverables described in Tasks 1-3, and a summary of the study process. The report will include any performance metrics developed as part of the study; analysis of WSDOT performance metrics; a description of the methodology used in conducting the analyses including statistical and sampling analyses; and all raw and summarized data collected for this study, in a format that can be manipulated, tested and replicated; and a PowerPoint presentation summarizing the study.

The study recommendations shall be those of the Consultant.
**Draft report.** By November 29, 2017, the Consultant will deliver the draft report to the JTC Project Manager who will share it with the Staff Workgroup for review and comment. The Consultant shall work with the JTC Project Manager on review of the draft reports, and shall incorporate any needed changes.

The Consultant will present the draft report and a PowerPoint presentation to the JTC at its December 14, 2017, meeting in Olympia.

**Draft final report.** By December 19, 2017, the Consultant will deliver the draft final report to the JTC Project Manager who will share it with the Staff Workgroup for review and comment. The Consultant shall work with the JTC Project Manager on review of the comments, and incorporate any needed changes. The final version of the draft final report shall be delivered to the JTC Project Manager by January 2, 2018. *(Please note that it becomes the Final Report only after the JTC Executive Committee votes on accepting the report, which will likely occur in early January 2018.)*

Deliverable: Draft and Draft Final Reports
III.  **CONTRACT DELIVERABLES**

The Consultant will provide the following services and deliverables:

1. The Consultant shall submit a work plan to meet the requirements of Section II of this study proposal. The work plan shall include:
   - Specific steps detailing how this study will be carried out
   - The specific tasks to be performed and by whom
   - The expected duration and level of effort in hours by person for each task
   - The specific data that will be needed, along with data sources and
   - A schedule for performing the tasks
   - A detailed budget

   The JTC Project Manager will review, comment on, and approve the final work plan. Any subsequent changes to the work plan shall also require approval by the JTC Project Manager.

2. In conducting the study, the Consultant shall facilitate the Staff Workgroup meetings/conference calls. JTC staff will assist with scheduling meetings and/or conference calls. For any in-person meetings, JTC staff will secure and cover expenses for meeting locations and catering.

3. The Consultant Project Manager shall have, at a minimum, twice-monthly scheduled conference calls with the JTC Project Manager. This requirement may be changed by mutual agreement of the Consultant and JTC Project Manager.

4. The Consultant shall prepare and present to the JTC Project Manager, monthly written progress reports that address and summarize the issues in the Consultant’s contracted Scope of Work and Work Plan.

5. The Consultant shall prepare deliverables as described above in Tasks 1-6. These deliverables will be included in the Draft and Final Reports. The Consultant shall present draft deliverables to the JTC Project Manager and Staff Workgroup, for comments and suggestions. The Consultant shall work with the JTC Project Manager on review of the draft deliverables, and incorporate any needed changes.

6. The Consultant shall present a draft and draft final report to the JTC Project Manager and Staff Workgroup, for comments and suggestions. The draft report is due November 29, 2017, and the draft final report is due December 19, 2017. The Consultant shall work with the JTC Project Manager on review of the draft reports, and incorporate any needed changes.

7. The Consultant shall deliver 25 printed and appropriately bound color copies of the accepted Final Report, and an electronic version suitable as printing “master” (Word and PDF) and for web-based distribution.
IV. OVERSIGHT AND ADMINISTRATIVE RESPONSIBILITY

The JTC will have prime oversight for this study. The clients of this study are the four JTC Executive Committee Members (the Chairs and Ranking Members of the House and Senate Transportation Committees), who are represented in day-to-day study activities by the JTC Project Manager.

JTC staff will be responsible for the following activities:
- Prepare and publish the scope of work and administer the study process
- Negotiate the contract with the Consultant
- Administer the contract (review and approve invoices, ensure milestones are being met, etc.)
- Participate in regularly scheduled briefings with Consultant
- Receive, evaluate and edit Consultant products
- Oversee communications and meetings between JTC Executive Committee members, the Consultant, WSDOT and the Staff Workgroup

V. QUALIFICATIONS

- Consultant must be licensed to do business in the state of Washington.
- JTC shall also examine Consultant for responsibility. Responsibility shall include such measures as insurance coverage that meets state requirements, references, prior experience and satisfaction of existing clients, and other information related to responsibility.

VI. DEFINITIONS

- Consultant - the Consultant selected to perform the stated services.
- JTC – Joint Transportation Committee, a Washington State legislative agency governed by an Executive Committee comprised of the Chairs and Ranking Members of the House and Senate Transportation Committees. JTC shall mean the Executive Committee, Committee Coordinator, Project Manager, and/or any other staff of the JTC.
- JTC Members – the four Members of the JTC Executive Committee, who are the Chairs and Ranking Members of the House and Senate Transportation Committees.
- JTC Coordinator – the Chief Executive Officer of the Joint Transportation Committee.
- JTC Project Manager – the JTC staff person who is lead staff for the study.
- Contract definitions are provided in the State of Washington General Terms and Conditions for personal services contracts in Exhibit A.
VII. PROJECT BUDGET

The budget for this project shall not exceed a maximum of $160,000. Any resulting contract for this project will be subject to the standard state of Washington General Terms and Conditions for personal services contracts. A copy is attached to this RFP as Exhibit A.

VIII. INSTRUCTION TO CONSULTANT

A. SUBMISSION OF PROPOSAL

NOTE: All times listed below refer to local time in Olympia, Washington.

1. The Consultant shall submit its proposal to accomplish the scope of work by 5:00 PM on May 22, 2017.
   Joint Transportation Committee (JTC)
   Sonia Plasencia, RFP Coordinator
   P.O. Box 40937
   606 Columbia Street NW, #105
   Olympia, WA 98504-0937
   Sonia.Plasencia@leg.wa.gov

B. LETTER OF SUBMITTAL

The Letter of Submittal and the attached Certification and Assurances form (Exhibit B) must each be signed and dated by a person authorized to legally bind the Bidder to a contractual relationship, e.g., the President or Executive Director if a corporation, the managing partner if a partnership, or the proprietor if a sole proprietorship. Along with introductory remarks, the Letter of Submittal is to include by attachment the following information about the Bidder and any proposed subcontractors:

1. Name, address, principal place of business, telephone number, and fax number/email address of legal entity or individual with whom contract would be written.
2. Name, address, and telephone number of each principal officer (President, Vice President, Treasurer, Chairperson of the Board of Directors, etc.).
3. Legal status of the Bidder (sole proprietorship, partnership, corporation, etc.) and the year the entity was organized to do business as the entity now substantially exists.
4. Federal Employer Tax Identification number or Social Security number and the Washington Uniform Business Identification (UBI) number issued by the state of Washington Department of Revenue.
5. Location of the facility from which the Bidder would operate.
6. The names of any Washington State employees or former Washington State employees employed by the firm or on the firm’s governing board as of the date of the proposal. Include their position and responsibilities within the Consultant’s organization. If following a review of this information, it is determined by the JTC that a conflict of interest exists, the Bidder may be disqualified from further consideration for the award of a contract.
C. PROPOSAL FORMAT

The Consultant shall submit seven copies of the proposal on eight and one-half by eleven (8 1/2x11) inch paper with tabs separating the major sections of the proposal and one electronic PDF copy on CD. The five major sections of the proposal are to be submitted in the order noted below:

1. Letter of Submittal, including signed Certifications and Assurances (Exhibit B).

2. Technical Approach
   • The Technical Approach should respond to Tasks 1-6 of the Scope of Work, Section II of this scope of work, not to exceed ten pages. This page limitation does not include resumes, qualifications, work samples, the Letter of Submittal or signed Certifications and Assurances form.
   • The Technical Approach should describe the approaches, methodologies, and techniques that will be used to undertake each of these tasks and produce the deliverables; and identify each person responsible for each task. It should describe in as much detail as possible the anticipated tasks, levels of effort, schedules, and coordination work required to undertake the Tasks.

3. Management Approach
   • The Management Approach shall describe how the Consultant proposes to organize, manage, control, report on the status of the study, and identify all critical milestones. It should include the following:
     o A statement of qualifications to conduct this work.
     o Identification of the individual(s) who will do the actual work being proposed, with attached professional resumes. Please keep resumes as concise as possible.
     o An organization chart indicating the lines of authority for all personnel involved in performance of the potential contract.
     o A description of staff responsibilities and the amount of time they will devote to the project by task or topic area.
     o Include one copy of two samples of previous work similar to this type of project and an electronic copy on CD or the Internet link to these samples.

4. Cost Approach
   • The total cost of this work in a detailed budget, including direct and indirect labor, travel, and any other expenses (itemized). The cost description shall identify projected work hours and hourly rate(s) for each employee who will be assigned to this project, by name and task.

D. CONTRACT NEGOTIATION

The JTC Project Manager will work with the Consultant Project Manager to evaluate the Consultant’s proposal to accomplish the Scope of Work, and negotiate any required amendments to accomplish the Scope of Work.
IX. ESTIMATED SCHEDULE OF ACTIVITIES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Date(s)</th>
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<tbody>
<tr>
<td>Study proposal sent to Consultant</td>
<td>May 10, 2017</td>
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<tr>
<td>Consultant proposal due</td>
<td>May 22, 2017</td>
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<tr>
<td>Negotiation of contract</td>
<td>May 25-31, 2017</td>
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<td>Estimated contract start date</td>
<td>June 1, 2017</td>
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<td>Kick-off meeting/conference call with Staff Workgroup</td>
<td>Mid-June</td>
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<tr>
<td>Conference call with JTC Executive Committee</td>
<td>Mid-July, September, October (as needed)</td>
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<td>Conference calls with Staff Workgroup</td>
<td>July 31, September 19, and October 19</td>
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<tr>
<td>Draft Report due</td>
<td>November 29, 2017</td>
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<tr>
<td>Present draft findings and recommendations to JTC</td>
<td>December 14, 2017, Olympia</td>
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<tr>
<td>Draft final report due to Staff Workgroup</td>
<td>December 19, 2017</td>
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<tr>
<td>Final report due</td>
<td>January 8, 2018</td>
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X. PROPRIETARY INFORMATION

The Consultant’s proposal shall become public record, available for public inspection and copying as required by Chapter 42.56 RCW (the principal Washington State statute pertaining to accessibility to public records) except as exempted in that chapter or by other law. The permissible exemptions from public disclosure pursuant to Chapter 42.56 RCW are very narrow in scope and will be strictly construed. In the event that the Consultant desires to claim portions of its proposal as exempt from disclosure under the provisions of the aforementioned RCW, it is incumbent upon the Consultant to identify clearly those portions in a proposal transmittal letter. The transmittal letter must identify the page and particular exemption(s) from disclosure upon which it is making its claim. Further, each page claimed to be exempt must be clearly identified by the word "CONFIDENTIAL" printed on the lower right-hand corner of the page. Designating the entire proposal as confidential is not acceptable and will not be honored.

NOTE: The Consultant’s proposal will be attached to the resulting contract and incorporated therein by that attachment. Therefore, as part of a public state agency contract, the entirety of the Consultant's proposal will be subject to public disclosure regardless of any claim of confidentiality or previously applicable statutory exemption. Nevertheless, should the Consultant obtain a court order from a Washington State court of competent jurisdiction prohibiting disclosure of parts of its proposal prior to the execution of the contract incorporating the same, the JTC shall comply with the court order. The burden is upon the Consultant to evaluate and anticipate its need to maintain confidentiality and to proceed accordingly. Timeliness will be of the essence; a delay in execution of the contract to accommodate a petition to the courts will not be allowed.
EXHIBIT A

GENERAL TERMS AND CONDITIONS

DEFINITIONS -- As used throughout this contract, the following terms shall have the meaning set forth below:

A. The "Joint Transportation Committee," or “JTC,” shall mean the Washington State Joint Transportation Committee, any division, section, office, unit, or other entity of JTC or any of the officers or other officials lawfully representing the JTC.

B. "Contractor" shall mean that firm, provider, organization, individual, or other entity performing services under this contract, and shall include all employees of the Contractor.

C. "Subcontractor" shall mean one not in the employment of the Contractor, who is performing all or part of those services under this contract under a separate contract with the Contractor. The terms "Subcontractor" and "Subcontractors" means Subcontractor(s) in any tier.

ADVANCE PAYMENTS PROHIBITED -- No payment in advance or in anticipation of services or supplies to be provided under this contract shall be made by JTC.

CHANGE OF CONTROL OR PERSONNEL -- Contractor shall promptly and in any case within twenty-four (24) hours notify the JTC Project Manager in writing:

1. If any of the representations and warranties of the Contractor set forth in this contract shall cease to be true at any time during the term of this contract;
2. Of any material change in the Contractor's management staff;
3. Of any change in control of the Contractor or in the business structure of the Contractor;
4. Of any other material change in the Contractor’s business, partnership, or corporate organization relating to this engagement. All written notices regarding changes in management staff shall contain the same information about newly assigned management staff as was requested by JTC in the RFP and such additional information as may be requested by the JTC. For purposes hereof, the term “management staff” shall mean those persons identified as senior management in any response to a RFP or who otherwise will exercise a major administrative role or major policy or consultan role to the provision of the Contractor’s services hereunder. All written notices regarding changes in control of the Contractor shall contain the same information about any new controlling entity as was requested by JTC in the RFP regarding the Contractor and such additional information as may be requested by JTC.

Approval of these changes rests solely with JTC and will not be unreasonably withheld.

CHANGES AND MODIFICATIONS -- The JTC may, at any time, by written notification to the Contractor, make changes in the general scope of the services to be performed under the contract. If any such changes cause an increase or decrease in the cost of, or the time required for the performance of this contract, an equitable adjustment may be made in the contract price or period of performance, or both, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of Contractor’s receipt of the notice of such change; provided, however, that the JTC may, upon determining that the facts justify such action, receive and act upon such claim asserted at any time prior to final payment under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

CONFLICT OF INTEREST -- JTC may, by written notice to the Contractor, terminate this contract if it is found after due notice and examination by the JTC that there is a violation of the State Ethics Law Chapter 42.52 RCW; or any similar statute involving the Contractor in the procurement of, or performance under, this contract.
In the event this contract is terminated as provided above, JTC shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor. The rights and remedies of JTC provided for in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law. The existence of facts upon which the JTC makes any determination under this clause shall be an issue and may be reviewed as provided in the "Disputes" clause of this contract.

**CONTRACTOR NOT EMPLOYEE OF THE AGENCY** -- The Contractor and his or her employees or agents performing under this contract are not employees or agents of JTC. The Contractor will not hold himself/herself out as or claim to be an officer or employee of JTC or of the state of Washington by reason hereof, nor will the Contractor make any claim or right, privilege or benefit which would accrue to an employee under Chapter 41.06 RCW.

**COVENANT AGAINST CONTINGENT FEES** -- The Contractor warrants that no person or selling agent has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established agent maintained by the Contractor for the purpose of securing business. JTC shall have the right, in the event of breach of this clause by the Contractor, to annul this contract without liability or, at its discretion, to deduct from the contract price or consideration or recover by other means the full amount of such commission, percentage, brokerage or contingent fee.

**DISPUTES** -- If a dispute should arise between the Contractor and JTC regarding the performance or expected outcomes of the contract, such dispute shall be referred to the JTC Committee Coordinator for review and decision. If the decision by the JTC Committee Coordinator is not satisfactory to the Contractor, the Contractor may request in writing that the dispute be reviewed by the Legislative Members of the JTC Executive Committee. Such written request shall be provided to the JTC Committee Coordinator within five (5) days following the Committee Coordinator’s decision. The Committee Coordinator shall present the written request to the Legislative Members of the JTC Executive Committee at its earliest convenience for review and decision. The decision of the Legislative Members shall become final and binding.

Unless mutually agreed to by the JTC and the Contractor, the work to be performed under this agreement shall not be delayed or stopped during the review of a dispute either by the JTC Committee Coordinator or the JTC Executive Committee.

**FORCE MAJEURE** -- Neither party shall be liable to the other or deemed in default under this contract for any delay or failure to perform its obligations under this contract if such delay or failure arises from any cause or causes beyond the reasonable control of the parties and without fault or negligence of the parties, including and not limited to acts of God, war, riots, strikes, fire, floods, earthquakes, epidemics, or other similar circumstances.

**GOVERNING LAW** -- This contract shall be governed by the laws of the state of Washington. In the event of a lawsuit involving this contract, venue shall be proper only in Thurston County. The Contractor, by execution of this contract, acknowledges the jurisdiction of the courts of the state of Washington in this matter.

**INDEMNIFICATION** -- The contractor shall defend, protect, and hold harmless the state of Washington, JTC, or any employees thereof, from and against all claims, suits or actions arising from the Contractor’s acts which are libelous or slanderous, which result in injury to persons or property, which violate a right of confidentiality, or which constitute an infringement of any copyright, patent, trademark, or trade name through use of reproduction of material of any kind.

**INDUSTRIAL INSURANCE COVERAGE** -- The Contractor shall provide or purchase industrial insurance coverage prior to performing work under this contract as required under Title 51 RCW. JTC will not be responsible for payment of industrial insurance premiums or for any other claim or benefit for this Contractor, or any Subcontractor or employee of the Contractor, which might arise under the industrial insurance laws during performance of duties and services under this contract.

**LICENSING, ACCREDITATION AND REGISTRATION** -- The Contractor shall comply with all applicable local, state and federal licensing, accreditation, and registration requirements and standards, necessary for the performance of this contract.

**LIMITATION OF AUTHORITY** -- Only the JTC shall have the express, implied, or apparent authority to alter, amend, modify or waive any clause or condition of this contract. Furthermore, any alteration, amendment, modification, or waiver of any clause or condition of this contract is not effective or binding unless made in writing and signed by the JTC.
NONASSIGNABILITY -- Neither this contract, nor any claim arising under this contract, shall be transferred or assigned by the Contractor.

NONDISCRIMINATION -- During the performance of this contract, the Contractor shall comply with all federal and state nondiscrimination laws, regulations, and policies.

NONCOMPLIANCE WITH NONDISCRIMINATION LAWS -- In the event of the Contractor's noncompliance or refusal to comply with any nondiscrimination law, regulation, or policy, this contract may be rescinded, canceled, or terminated in whole or in part, and the Contractor may be declared ineligible for further contracts with JTC. The Contractor shall, however, be given a reasonable time in which to cure this noncompliance. Any dispute may be resolved in accordance with the "Disputes" procedure set forth herein.

PAYMENT OF TAXES -- Contractor shall pay all applicable taxes assessed on the compensation received under this contract and shall identify and pay those taxes under Contractor's federal and state identification number(s).

RECORDS, DOCUMENTS AND REPORTS -- The Contractor shall maintain books, records, documents, data and other evidence of accounting procedures and practices which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this contract. These records shall be subject at all reasonable times to inspection, review, or audit by personnel duly authorized by the JTC, State Auditor or state or federal officials so authorized by law, regulation, or contract. The Contractor will retain all books, records, documents, and other materials relevant to this contract for six (6) years after the date of final payment, and make them available for inspection by persons authorized under this provision.

If any litigation, claim or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation claims, or audit findings involving the records have been resolved.

REGISTRATION WITH DEPARTMENT OF REVENUE -- The Contractor shall complete registration with the Department of Revenue, http://dor.wa.gov/Content/Home/Default.aspx, and be responsible for payment of all taxes due on payments made under this contract.

RIGHT OF INSPECTION -- The Contractor shall provide right of access to its facilities to the JTC, or any of its officers, or to any other authorized agent or official of the state of Washington or the federal government at all reasonable times, in order to monitor and evaluate performance, compliance, and/or quality assurance under this contract.

RIGHTS IN DATA -- Unless otherwise provided, data which originates from this contract shall be "works for hire" as defined by the U.S. Copyright Act and shall be owned by JTC. Data shall include, but not be limited to: working papers, reports, documents, pamphlets, advertisements, books, magazines, surveys, studies, computer programs, films, tapes, and/or sound reproductions. Ownership includes the right to copyright, patent, register, and the ability to transfer these rights.

Data which is delivered under the contract, but which does not originate therefrom shall be transferred to JTC with a nonexclusive, royalty-free, irrevocable license to publish, translate, reproduce, deliver, perform, dispose of, and to authorize others to do so; provided, that such license shall be limited to the extent which the Contractor has a right to grant such a license. The Contractor shall exert all reasonable effort to advise JTC, at the time of delivery of data furnished under this contract, of all known or potential invasions of privacy contained therein and of any portion of such document which was not produced in the performance of this contract. JTC shall receive prompt written notice of each notice of claim of copyright infringement received by the Contractor with respect to any data delivered under this contract. JTC shall have the right to modify or remove any restrictive markings placed upon the data by the Contractor.

SAFEGUARDING OF INFORMATION -- The use or disclosure by any party of any information concerning JTC for any purpose not directly connected with the administration of JTC or the Contractor's responsibilities with respect to services provided under this contract is prohibited except by written consent of the JTC.

SAVINGS -- In the event funding from state, federal, or other sources is withdrawn, reduced, or limited in any way after the effective date of this contract and prior to normal completion, JTC may terminate the contract under the "Termination for Convenience" clause, without the five-day notice requirement, subject to renegotiation under those new funding limitations and conditions.

SCOPE OF CONTRACT -- This contract and the attachments incorporate all the contracts, covenants, and understandings between the parties concerning the subject matter, and all such covenants, agreements, and
understandings have been merged into this contract. No prior contract or understandings, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this contract.

SEVERABILITY – The provisions of this contract are intended to be severable. If any term or provision is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the validity of the remainder of the contract.

SUBCONTRACTING -- Neither the Contractor nor any Subcontractor shall enter into subcontracts for any of the work contemplated under this contract without obtaining prior written approval of the JTC.

TERMINATION FOR CAUSE -- In the event the JTC determines the Contractor has failed to comply with the conditions of this contract in a timely manner, the JTC has the right to suspend or terminate this contract. In such event the Contractor shall be liable for damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, e.g., cost of the mailing, advertising, and staff time.

A termination shall be deemed a "Terminate for Convenience" if it is determined that the Contractor (i) was not in default, or (ii) failure to perform was outside of his or her control, fault or negligence.

TERMINATION FOR CONVENIENCE -- Except as otherwise provided in this contract, the JTC may, by five (5) days written notice, beginning on the second day after the mailing, terminate this contract in whole or in part when it is in the best interests of JTC. If this contract is so terminated, JTC shall be liable only for payment in accordance with the terms of this contract for services rendered prior to the effective date of termination.

TERMINATION PROCEDURE -- Upon termination of this contract, JTC, in addition to any other rights provided in this contract, may require the Contractor to deliver to JTC any property specifically produced or acquired for the performance of such part of this contract as has been terminated. The provisions of the "Treatment of Assets" clause shall apply in such property transfer.

JTC shall pay to the Contractor the agreed upon price, if separately stated, for completed work and services accepted by JTC, and the amount agreed upon by the Contractor and JTC for (i) completed work and services for which no separate price is stated, (ii) partially completed work and services, (iii) other property or services which are accepted by JTC, and (iv) the protection and preservation of property, unless the termination is for default, in which case the JTC shall determine the extent of the liability of JTC. Failure to agree with such determination shall be a dispute within the meaning of the "Disputes" clause of this contract. JTC may withhold from any amounts due the Contractor such sum as the JTC determines to be necessary to protect JTC against potential loss or liability.

The rights and remedies of JTC provided in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

After receipt of a notice of termination, and except as otherwise directed by the JTC, the Contractor shall:

1. Stop work under the contract on the date, and to the extent specified, in the notice;
2. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the work under the contract as is not terminated;
3. Assign to JTC, in the manner, at the times, and to the extent directed by the JTC, all of the rights, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case JTC has the right, at its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;
4. Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the JTC to the extent the JTC may require, which approval or ratification shall be final for all the purposes of this clause;
5. Transfer title to JTC and deliver in the manner, at the times, and to the extent directed by the JTC any property which, if the contract has been completed, would have been required to be furnished to JTC;
6. Complete performance of such part of the work as shall not have been terminated by the JTC; and
7. Take such action as may be necessary, or as the JTC may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which JTC has or may acquire an interest.
TREATMENT OF ASSETS --

1. Title to all property furnished by JTC shall remain in JTC's office. Title to all property furnished by the Contractor, for the cost of which the Contractor is entitled to be reimbursed as a direct item of cost under this contract, shall pass to and vest in JTC upon delivery of such property by the vendor. Title to other property, the cost of which is reimbursable to the Contractor under this contract, shall pass to and vest in JTC upon (i) issuance for use of such property in the performance of this contract, or (ii) commencement of use of such property in the performance of this contract, or (iii) reimbursement of the cost thereof by JTC in whole or in part, whichever first occurs.

2. Any property of JTC furnished to the Contractor shall, unless otherwise provided herein or approved by the JTC, be used only for the performance of this contract.

3. The Contractor shall be responsible for any loss or damage to property of JTC which results from the negligence of the Contractor or which results from the failure on the part of the Contractor to maintain and administer that property in accordance with sound management practices.

4. If any JTC property is lost, destroyed or damaged, the Contractor shall notify JTC immediately and shall take all reasonable steps to protect that property from further damage.

5. The Contractor shall surrender to JTC all property of JTC prior to settlement upon completion, termination, or cancellation of this contract.

6. All reference to the Contractor under this clause shall also include Contractor’s employees, agents, or Subcontractors.

WAIVER OF DEFAULT -- Waiver of any default shall not be deemed to be a waiver of any subsequent default. Waiver of breach of any provision of the contract shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of the contract unless stated to be such in writing, signed by the JTC and attached to the original contract.
CERTIFICATIONS AND ASSURANCES

I/we make the following certifications and assurances as a required element of the proposal to which it is attached, understanding that the truthfulness of the facts affirmed here and the continuing compliance with these requirements are conditions precedent to the award or continuation of the related contract(s):

1. I/we declare that all answers and statements made in the proposal are true and correct.

2. The prices and/or cost data have been determined independently, without consultation, communication, or agreement with others for the purpose of restricting competition. However, I/we may freely join with other persons or organizations for the purpose of presenting a single proposal.

3. The attached proposal is a firm offer for a period of 60 days following receipt, and it may be accepted by the JTC without further negotiation (except where obviously required by lack of certainty in key terms) at any time within the 60-day period.

4. In preparing this proposal, I/we have not been assisted by any current or former employee of the state of Washington whose duties relate (or did relate) to this proposal or prospective contract, and who was assisting in other than his or her official, public capacity. (Any exceptions to these assurances are described in full detail on a separate page and attached to this document.)

5. I/we understand that the JTC will not reimburse me/us for any costs incurred in the preparation of this proposal. All proposals become the property of the JTC, and I/we claim no proprietary right to the ideas, writings, items, or samples, unless so stated in this proposal.

6. Unless otherwise required by law, the prices and/or cost data which have been submitted have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by him/her prior to opening, directly or indirectly to any other Bidder or to any competitor.

7. I/we agree that submission of the attached proposal constitutes acceptance of the solicitation contents and the attached sample contract and general terms and conditions. If there are any exceptions to these terms, I/we have described those exceptions in detail on a page attached to this document.

8. No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a proposal for the purpose of restricting competition.

9. The bidder certifies that no condition exists with respect to the bidder, or any of its employees, regarding any current or past relationship with the JTC or other agencies that violate Chapter 42.52 RCW, the "Ethics in Public Service" Law.

___________________________________________
Signature of Bidder

___________________________________________
Title                                      Date