



**Request for Proposals:  
RFP # 50771  
Washington Commercial Code Evaluation Study**

## Table of Contents

1	Introduction.....	3
2	Background.....	3
3	Objectives.....	3
4	Sources.....	4
5	Scope of Work.....	4
6	Deliverables.....	4
6.1	Kickoff Meeting.....	4
6.2	Project Management & Stakeholder Engagement (Work Groups).....	5
6.2.1	Sample Design Work Group.....	5
6.2.2	Data Collection Work Group.....	5
6.2.3	Reporting Work Group.....	6
6.3	Sample.....	6
6.4	Survey Instruments.....	6
6.4.1	Document Survey Methods.....	7
6.5	Recruit Sampled Sites.....	7
6.5.1	Document Recruiting Methods.....	7
6.6	Field Data Collection.....	7
6.7	Data Analysis and Reporting.....	7
6.7.1	Baseline Characteristics and Compliance Assessment.....	7
6.7.2	Energy Assessment.....	8
6.7.3	Database.....	8
6.7.4	Report.....	8
7	Contractor Qualifications.....	9
8	Budget & Timeline.....	9
8.1	Timeline.....	9
8.2	Budget.....	9
9	Proposal Submission Instructions and RFP Requirements.....	9

9.1	Proposal Appendix .....	10
9.2	RFP Schedule .....	10
9.3	RFP Point of Contact.....	11
9.4	Intent to Respond.....	11
10	Selection and Proposal Scoring.....	11
11	Insurance/Warranties .....	12
11.1	Commercial General Liability insurance .....	12
11.2	Business Automobile Liability insurance .....	12
12	Miscellaneous .....	12
	Appendix A - Intent to Respond Form.....	13
	Appendix B - Scoring Sheet Sample.....	14
	Appendix C – Oregon Commercial Code Evaluation Study: Methodology Components & Audit Instrument .....	15
	Appendix D – Cost/Task Breakout Table Format.....	16

## 1 Introduction

### About the Northwest Energy Efficiency Alliance

The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 utilities and energy efficiency organizations working on behalf of more than 13 million energy consumers. NEEA is dedicated to accelerating both electric and gas energy efficiency, leveraging its regional partnerships to advance the adoption of energy-efficient products, services and practices.

Since 1997, NEEA and its partners have saved enough energy to power more than 900,000 homes each year. As the second-largest resource in the Northwest, energy efficiency can offset most of our new demand for energy, saving money and keeping the Northwest a healthy and vibrant place to live. [www.neea.org](http://www.neea.org)

## 2 Background

Commercial building codes have the potential to significantly affect energy consumption throughout the Northwest. Working with regional stakeholders, NEEA works with state code bodies to identify potential code measures, works to get them adopted and supports their implementation. To assess the effectiveness of these combined efforts, NEEA is commissioning a series of evaluation studies in the commercial new construction sector in the Northwest states (Oregon, Washington, Idaho, Montana). This RFP solicits bids for conducting the Washington Commercial Construction Code Evaluation.

The Washington Commercial Construction Code Evaluation study will assess the degree to which code is present in newly constructed /newly occupied buildings, as well as to estimate these buildings' energy performance. The results of the study will provide direction to the development and implementation efforts of the NEEA Codes team and provide other regional code stakeholders guidance in targeting their energy efficiency work in the commercial new construction sector.

## 3 Objectives

To evaluate the presence and effectiveness of the current Washington commercial new construction code through review of current new construction market practices in the following areas:

1. Building Characteristics  
Catalog the major current design and engineering practices by major building type; particular attention should be paid to primary characteristics of the envelope, mechanical system, lighting and building service water.
2. Compliance  
Assessment of compliance of each building in a sample of the Washington commercial new construction market. The primary analysis of compliance will be focused on the major systems - envelope, mechanical system, lighting and building service water.
3. Energy Use  
Analysis of the energy performance of each building through the use of billing data which has been normalized, summarized, and disaggregated by end use.

## 4 Sources

Title & Description	Link
Commercial Code Evaluation Pilot Study Final Report	<a href="https://neea.org/resources/commercial-code-evaluation-pilot-study-final-report">https://neea.org/resources/commercial-code-evaluation-pilot-study-final-report</a>
Oregon Commercial Code Evaluation Audit Instrument	<a href="https://neea.org/resources/oregon-commercial-code-evaluation-audit-instrument">https://neea.org/resources/oregon-commercial-code-evaluation-audit-instrument</a>

## 5 Scope of Work

NEEA is soliciting bids under this RFP for a contractor capable of implementing a research design to meet the project objectives as described in Section 3 above. NEEA is currently fielding the Oregon Commercial Code Evaluation study using a research design that addresses similar objectives. A summary of the methodology components and the audit instrument for the Oregon study are found in Appendix C. NEEA recommends bidders review this appendix. Note that NEEA is open to other approaches than that which is represented in Appendix C, but recommends bidders carefully consider the costs and benefits of any proposed alternative approaches.

NEEA will require the selected contractor to lead work group sessions on sample design, data collection, and reporting. For each of the work groups, NEEA anticipates two sessions will be needed.

Any recommended approach must be rigorous in terms of methodology, sampling, and project implementation. Where applicable, high levels of statistical precision are preferred. However, NEEA encourages bidders to consider if the traditional industry 90/10 standard is reasonable for all or parts of the study, and where it is not, to communicate the rationale for lowering the standard.

## 6 Deliverables

At a minimum, NEEA expects the following deliverables for this evaluation study.

### 6.1 Kickoff Meeting

The selected contractor will participate in an inaugural meeting to discuss project administration and expectations. The meeting will be set for approximately two hours, and will take place at NEEA's offices in Portland, Oregon.

For this meeting, the contractor will work with the NEEA Project Manager to prepare an agenda to ensure the following are covered: research goals, a description of the methodology to be used, initial timeline targets (including working group sessions), and project management topics.

Based on the results of the kickoff meeting, the contractor will create a work plan including the following:

- Project methodology
- Project management and communication channels with NEEA staff and stakeholder staff;

- Conducting stakeholder working sessions for sample design, data collection, and reporting;
- Training and supporting field staff;
- Recruiting sites and scheduling field work;
- Field work protocols;
- Schedule of the major tasks, including milestones, and estimated completion dates for each task;
- Scope and delivery dates of all written deliverables;
- Quality assurance protocols;
- Time required for each major task; and,
- Party responsible for each task.

## **6.2 Project Management & Stakeholder Engagement (Work Groups)**

The selected contractor will develop a robust project management plan. Bidder proposals should include their proposed project management team and how their project managers will keep NEEA informed of progress or unexpected setbacks.

NEEA will work to engage stakeholders through work groups focused on various tasks associated with the project sample design, data collection and reporting

Bidders should note that NEEA is responsible for the outreach and initial engagement with stakeholders in order to establish work group rosters, as well as scheduling of work group sessions. NEEA does not proscribe the inclusion of a separate facilitation contractor, but bidders should understand the importance of these sessions and their contribution to the overall work. Proposals should provide evidence of experience in effective stakeholder communication.

### **6.2.1 Sample Design Work Group**

The selected contractor will work with the NEEA Project Manager to develop an initial approach to designing the sample of commercial new construction sites in Washington state. The proposed sample design should reflect conscious decisions about the particular objectives of this study. As an example, in the Oregon study, rather than pursuing a representative sample across all building types, the work group identified key building types of interest and designed the sample accordingly. Based on work group input, the Oregon study ultimately targeted multifamily, retail, office and schools, stratified by size.

NEEA anticipates that the contractor will lead two meetings with this group. The first will present the initial sample design for input and discussion by stakeholders. The contractor will then revise the sample design based on this input and review the revised design with the work group in the second session.

### **6.2.2 Data Collection Work Group**

Data collection protocols will be established to ensure stakeholder customer relationships are protected; that stakeholders are aware of and engaged to the degree desired in customer contact; that customer data is protected and that the data collected supports the delivery of reliable results.

For this work group, the selected contractor will work with NEEA to create an initial customer contact/stakeholder communication, data security, and data collection protocol. In addition, the

contractor will present data collection specifics for site visits (in the form of the field audit instrument and the forms to be used in collecting customer billing data).

NEEA anticipates that the contractor will lead two meetings with this group. The first will present the initial protocol for input and discussion by stakeholders. The contractor will then revise the protocol based on this input and review the revised design with the work group in the second session.

### **6.2.3 Reporting Work Group**

To ensure that the selected contractor produces research results that stakeholders find relevant and useful, the contractor will convene two work group sessions focused on how to analyze and communicate findings. The contractor will lead a session to gather feedback as to how the stakeholders envision using the findings from this study. Based on this discussion, the contractor will develop a draft reporting outline in terms of topics, analysis and form. Later in the project - once the data are all in - the contractor will convene a second work group session to review and work with the findings, based on the initial session feedback. The result of this session will be the basis of the final report.

## **6.3 Sample**

Based on the conclusions reached from Sample Design work group regarding study objectives, and confidence and accuracy targets, the selected contractor will create and deliver a sample frame and base sample, by any stratification criteria identified through the work group process. NEEA will use Dodge data as the sample frame and will provide it to the contractor.

## **6.4 Survey Instruments**

The selected contractor shall draft and submit all survey/data collection instruments to NEEA's Project Manager for review and final approval. NEEA recommends the contractor use the audit instrument employed in the Oregon Commercial Code Evaluation study as the basis for creating the final instrument for the Washington Commercial Code Evaluation study.

The instrument must be designed to collect sufficient data to: create a commercial new construction baseline and to assess compliance for major building systems – including envelope, mechanical, lighting and service water heating. Compliance will be targeted to elements that can be assessed based on building audit as well as from available plans and specifications.

The instrument should be tested on at least three sites drawn from the sample, selected to represent a range of building sizes, building types, and equipment systems types. The tests may count against the site visit quota

Modifications and improvements should be implemented real-time during this testing. If possible, test sites should be re-surveyed with the revised instruments so that these test cases can be used in developing training materials for the field audit staff. The site data collected will be considered part of the sample.

Training materials should be developed and vetted with members of the field audit staff used for this project. Any changes to the instruments, identified during the development of training materials should be implemented and all test cases brought into conformance.

Data entry systems should be developed and tested using the data from test sites, including appropriate data quality control elements. The data entry systems must include any necessary procedures for coding raw data after an on-site survey is complete. The data entry for the test cases should be subject to review to confirm the data are reliable, well documented, and consistently rendered across the test cases. Any changes identified by this review should be implemented through appropriate modifications to survey instruments and data entry design and procedures.

#### **6.4.1 Document Survey Methods**

Because future Commercial Code Evaluation studies will be conducted, it is important that all methods used in completing the tasks/activities described above are well documented and that the procedures, rationale for changes, and training materials be provided to NEEA. The awarded contractor will be expected to highlight any modifications made to proposed data collection procedures in any stage of the project, including design, pre-testing, or mid-project. As appropriate, the contractor should provide recommendations regarding any changes to procedures that should be made in future iterations of the study.

### **6.5 Recruit Sampled Sites**

The selected contractor will recruit sites. To improve recruiting success and increase access to any available as-built plans and COMcheck forms, recruiting should target buildings that are nearing completion or have recently been completed, preferably before the certificate of occupancy is issued.

Recruitment materials should be created and include content that can be delivered by the utility contacts and/or the recruitment/field audit staff. Bidders should consider the use of financial or non-financial incentives to encourage the participation of building representatives. The selected contractor will be expected to train the survey work force that will be responsible for recruitment and scheduling.

#### **6.5.1 Document Recruiting Methods**

Documentation of recruiting procedures for recruitment and sample management will be completed by the selected contractor. The initial document will describe the step-by-step procedure used by the contractor.

### **6.6 Field Data Collection**

Field data collection will include plan reviews, onsite audits, and owner/operator interviews. The selected contractor will assign each site a qualified auditor to complete the building assessment. These staff will review any available documentation, travel to selected sites and conduct on-site building assessment surveys. Data should be collected consistent with the data collection protocols developed with the Data Collection work group, and should be coded appropriately and reviewed for quality and completeness. Bidders should consider whether field photography is a viable source of backup data, including how it might be used and where it might prove too burdensome/costly.

### **6.7 Data Analysis and Reporting**

The selected contractor will analyze and report collected data.

#### **6.7.1 Baseline Characteristics and Compliance Assessment**

The selected contractor will assemble characteristic summaries for the entire sample. These summaries will be used to describe current building practices for the commercial building

sector as a whole. The summaries will include primary characteristics of the envelope, mechanical system, lighting and building service water associated with the compliance assessment.

In interviews with on-site managers, the contractor should work to understand the approach taken to achieve code compliance, whether any green building programs were involved and whether commissioning and tune-up practices were used in the buildings.

The contractor will assess compliance for each building - for each building system and for the whole building. The contractor should focus the compliance summary on a few key components. Compliance will be based on comparing overall targets from the code (e.g., lighting power density, overall UA and window areas) to field findings. Mechanical system compliance will be determined by comparing key mechanical equipment design characteristics to economizer and equipment sizing requirements in code. The compliance details of the target components of each major system will be the focus of assessment. The overall compliance of the building will be assessed based on these details.

#### **6.7.2 Energy Assessment**

The selected contractor will assess the energy performance of the building sample. Guided by the process created in the Data Collection working group, the contractor will collect electric and gas utility billing data for a minimum of 12 months for each building. The contractor will analyze, normalize, summarize, and disaggregate the billing data by end use.

The contractor will correlate the total and end-use Energy Use Intensities (EUIs) with the compliance assessment for each building. The contractor should consider whether to benchmark the EUIs against other data sources or policy targets.

#### **6.7.3 Database**

The selected contractor will combine all data collected into an analysis-ready dataset. The contractor will provide a “flat file” (one record per site) summary dataset with key calculated metrics, such as energy use intensity by fuel and lighting power density by space type. The contractor will need to provide a data dictionary, data sources, coding and editing procedures, statistical weights, and other important information for potential users of the data. This database should be inclusive of all sites. The contractor should plan to provide a mockup or Entity Relationship Diagram depicting database structure before finalizing it. The proposed database structure will be reviewed by NEEA staff and other external parties deemed appropriate by NEEA.

#### **6.7.4 Report**

In addition to the dataset, NEEA also requires a report summarizing the broad findings of the Washington Commercial Code Evaluation study. The focus of the findings and structure of the report will be based on stakeholder needs as identified in the work group process. A report outline shall be submitted to the NEEA Project Manager. This outline will serve as a basis for discussion between the contractor and the NEEA Project Manager and the Reporting work group. As described above, the Reporting work group will meet to review the outline, findings and provide guidance to the contractor in the formulation of the draft final report.

The selected contractor will produce the draft final report and present it to the NEEA Project Manager for review and comment. This draft will be reviewed and commented on by NEEA staff, and other external parties deemed appropriate by NEEA. Based on these comments, the

contractor shall make revisions and deliver to NEEA a final version of the report. It may require multiple iterations between the contractor and NEEA to achieve an acceptable final report.

The NEEA Project Manager may request other deliverables as necessary to support the project. These will usually be in the form of interim memos or “white papers” whose information will later be incorporated into the final report. As such, these deliverables should be considered covered under the existing work plan. NEEA will consider contract modifications to the extent these work products are outside the original scope.

## **7 Contractor Qualifications**

NEEA is seeking a qualified contractor or team of contractors to conduct the Washington Commercial Code Evaluation study. Bidders should demonstrate experience with and qualifications in the following: executing complex sample designs; outreach and recruitment of commercial buildings; developing and executing reliable site visit protocols; development and deployment of field surveys; and effective data management in the form of databases, data visualization, data cleaning, and analysis.

## **8 Budget & Timeline**

### **8.1 Timeline**

Bidders should provide a proposed timeline for all major phases and milestones of this project broken out by proposed task and associated deliverables. Analysis-ready data should be available by Q3 2020. Final report completion is targeted for Q4 2020.

### **8.2 Budget**

The maximum budget for this project is \$750,000. Bidders should provide cost estimates (on a time & materials basis) by proposed task, including a breakout of any incentives and direct costs; key tasks include:

1. Kickoff Meeting
2. Project Management & Stakeholder Engagement (Work Groups)
3. Sample
4. Survey Instruments
5. Recruiting Sites
6. Field Data Collection
7. Data Analysis and Reporting

Bidders should include an hourly rate sheet for all project contributors during the project period in the Appendix section of their proposal. Please work within the maximum budget described above. If necessary, bidders are asked to suggest changes to enable completion of the project on budget without sacrificing study integrity.

## **9 Proposal Submission Instructions and RFP Requirements**

Bidders shall submit one (1) hardcopy and one (1) electronic copy of their proposal to the RFP Point of Contact no later than the end of business day in the RFP schedule listed below.

Bidders should note that proposals MUST adhere to the page limits noted below. Core proposals must be no longer than 30 pages (not including the Appendix) and include the following components:

1. **Executive Summary (2-page maximum)** – Include the key strategies and approach to executing the Washington Commercial Code Evaluation study, a summary of proposed costs, and the reasons NEEA should select your team.
2. **Introduction (2-page maximum)** – State your understanding of the scope and key objectives of this project.
3. **Project Team Identification (3-page maximum)** – Provide information regarding the proposed project team, including project management and management of field work. Project team bios and/or resumes should be included in the Appendix section.
4. **Proposed Approach (16-page maximum)** – Describe how you expect to execute the study design described in this RFP. Please include any notable strengths or risks you see in proposed design and your approach to leveraging those strengths or mitigating those risks.
5. **Timeline (3-page maximum)** – Provide the proposed timeline for all major phases and milestones of the project broken out by proposed task and associated deliverables.
6. **Project Cost (4-page maximum)** – Provide a summary cost estimate for each task of the project and identify any critical assumptions that underlie those costs. A detailed breakout of costs by task (See Appendix D below) including direct costs as well as an hourly rate sheet should be included the Proposal Appendix. General format should be a cost matrix whereby tasks are “rows” and contributors are identified in “columns”.

## 9.1 Proposal Appendix

Appendix materials do not count against the 30-page limit above. Please include each of the following items in the proposal Appendix section:

- **Hourly Rate Sheet:** For all proposed project team members; include estimated hours by task.
- **Company Background & Qualifications**
- **Project Team & Team Bios:** Include information about project team members and team structure, past team efforts on similar work, years of experience, and other relevant qualifications.
- **References:** Provide three (3) references for similar work conducted.
- **In Good Standing Documentation:** Provide documentation reflecting your organization’s good financial standing, such a Dun & Bradstreet report

## 9.2 RFP Schedule

Intent to bid due by	5/25/2018
Questions submitted by	5/25/2018
Answers to Questions e-mailed back by	5/30/2018

Written Proposals due by	6/11/2018
Contract Award Date	6/16/2018

### 9.3 RFP Point of Contact

Proposers shall email all correspondence, included but limited to, questions and submissions to:

Steve Phoutrides  
 Market Research and Evaluation Project Manager  
 Northwest Energy Efficiency Alliance  
 421 SW 6<sup>th</sup> Avenue, Suite 600  
 Portland, OR 97204  
 E-mail: [sphoutrides@neea.org](mailto:sphoutrides@neea.org)

### 9.4 Intent to Respond

All “Intent to Respond” forms (provided in Appendix A of this RFP) must be received no later than by the end of business day listed in the RFP Schedule above.

Only those parties submitting the “Intent to Respond” form will be provided with updates to the RFP, have questions responded to and have their proposals considered.

## 10 Selection and Proposal Scoring

Bidding firms will be assessed in terms of the overall responsiveness to the RFP and how well all RFP requests have been addressed including, but not limited to:

- 1) Demonstrated understanding of project objectives, nuances, and potential roadblocks to meeting objectives.
- 2) Overall approach to executing proposed study design.
- 3) Thoughtfulness and appropriateness of site recruitment approach and creative ideas for hard-to-recruit buildings.
- 4) Reasonableness of work plan – timing, tasks and deliverables.
- 5) Prior experience developing database deliverables.
- 6) Overall cost and value.
- 7) Experience of the project management team and evidence of effective project management.

In addition, the following factors will play a key role in the selection process:

- 1) The experience and qualifications of the individuals specifically proposed to execute and manage the project. (Note: Proposed staffing is a significant factor in bidder selection. As such, no changes in key staff/substitutions or changes in roles/responsibilities can be made without the written agreement of NEEA Project Manager once the RFP has been awarded.)
- 2) The experience of the firm or team of firms making the proposal.
- 3) The capability to execute the plan, including past experience and aptitude for collaboration.

Proposals will be evaluated by the NEEA Project Manager and other stakeholders.

## **11 Insurance/Warranties**

Without limiting any liabilities or any other obligations of Contractor, Contractor shall, prior to commencing work, secure and continuously carry with insurers having an A- rating (or better) from A.M. Best Company the following minimum insurance coverage:

### **11.1 Commercial General Liability insurance**

With a minimum single limit of \$1,000,000. The coverage shall include:

1. Bodily Injury and Property Damage Liability;
2. Contractual Liability;
3. Products and Completed Operations to protect against and from all loss by reason of injury to persons or damage to property, including all third persons, and property of NEEA and all third parties based upon or arising out of Contractor's operations hereunder, including the operations of its subcontractors of any tier.

### **11.2 Business Automobile Liability insurance**

With a minimum single limit of \$1,000,000 for bodily injury and property damage with respect to Contractor's vehicles, whether owned, hired or non-owned, assigned to, or used in the performance of the Tasks.

## **12 Miscellaneous**

NEEA is under no obligation to select any proposal that results from this solicitation, nor is there any obligation or intent implied to reimburse any party for the cost of preparing a proposal in response to this RFP. NEEA encourages bidders to submit proposals that include innovative methods or tasks in addition to or different from those listed in the RFP.

## Appendix A - Intent to Respond Form

**RFP # 50771**

Project Title: Washington Commercial Code Evaluation Study

NEEA Project Manager: Steve Phoutrides

**Please email completed form to [sphoutrides@neea.org](mailto:sphoutrides@neea.org) by 4.00 pm (PST) on May 25, 2018:**

<b>Company</b>	
<b>Address</b>	
<b>City, State, Zip</b>	
<b>Contact Name</b>	
<b>Contact Title</b>	
<b>Phone #</b>	
<b>Fax #</b>	
<b>E-mail</b>	

The company named above intends to submit a proposal in response to NEEA's request for proposal listed above.

Signature of authorized representative: \_\_\_\_\_

Print Name \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

## Appendix B - Scoring Sheet Sample

*This is an example only. NEEA reserves the right to change the scoring criteria anytime without notice.*

Proposal Scoring Sheet	
<b>RFP #:</b>	
<b>Title:</b>	
<b>Reviewer:</b>	
Reviewers complete all sections in yellow. Rate each category 1-5 <b>5 = Exceptional, 4 = Outstanding, 3 = Good, 2 = Needs Improvement, 1 = Weak</b>	
Strength of the Proposal	
Responsiveness to the RFP	
Strength of the approach	
Creativity in leveraging resources	
Samples of work products	
Overall proposal (complete, clear, professional)	
	<b>0</b>
	<b>100%</b>
Comments:	
Strength & Cohesiveness of the Project Team	
Overall ability to manage the project	
Technical ability to execute tasks	
Research/analysis ability	
Overall team cohesiveness	
	<b>0</b>
	<b>100%</b>
Comments:	
Qualifications & Experience	
Experience working with electric utilities	
Project management with multi-disciplined approaches	
Implementation of sample design, load survey research, metering, etc.	
Experience working with organizations in a team atmosphere	
	<b>0</b>
	<b>100%</b>
Comments:	
Overall proposal Comments	
Comments:	
<b>Total Score</b>	<b>0.00</b>

## **Appendix C – Oregon Commercial Code Evaluation Study: Methodology Components & Audit Instrument**

This appendix is provided as an example of how the Oregon Commercial Code study was structured. It is provided for illustration of some of the study's key, high level deliverables which bidders should consider as they structure their proposals.

### **Sample Design**

Contractor will develop a prototype sample design based on new commercial construction such that buildings will have been occupied for 12 months. Though adjustable based on timing and other factors, the sample could cover a period from Q2:2015 through Q2. The overall goal of the sample is to create a structure that is both reflective of stakeholder needs and statistically representative of the population based on those needs.

### **Building Characteristics**

Contractor will assemble characteristic summaries for the entire sample. These summaries will include primary characteristics of the envelope, mechanical system, lighting and building service water associated with the compliance assessment. The summaries will be divided into the major building types. The summaries will include as much detail as possible to establish the design criteria used in these buildings. The use of other green building programs will be identified during the building owner interviews. In addition, the approach to code compliance and building efficiency will be documented. Finally, the use of commissioning and tune-up practice used in the buildings will be discussed.

### **Compliance Assessment**

Code compliance can be determined by reviewing completed and occupied buildings drawn from the sample. The building review includes a combination of code and as-built documentation as well as field review of building characteristics. Compliance analysis can be focused on key components of the building that are likely to be significant to the building's overall energy performance. A compliance assessment for each building system in all surveyed buildings will be completed: envelope, HVAC, lighting, and service water. Compliance is established for a subset of key code requirements for each system, and these results are used to determine compliance for each system. Overall building compliance can be estimated.

### **Energy Performance Assessment**

Energy performance of the sampled buildings will be based on collected electric and gas utility billing data for a minimum of 12 months for each building. Building energy use is normalized, summarized, and disaggregated by end use. Total and end-use EUIs can be used to correlate energy use and compliance in the buildings.

### **Audit Instrument**

The attached file contains the Audit Instrument used in the Oregon Commercial Code Evaluation study (See Sources section above)

## Appendix D – Cost/Task Breakout Table Format

**Table: Costs for Washington Commercial Code Evaluation Study**

Activities for 2012	Name/Title of Consultant	Name/Title of Consultant	Name/Title of Consultant	Name/Title of Consultant	Total Hours	Total Cost (\$)
Billing Rate Per Hour (\$) (Proposer shall complete this row for each consultant)	\$	\$	\$	\$		
	No. of Hours Per Task		\$			
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
						\$
<b>TOTAL COST</b>						\$