

# WSDOT Problem Statements

## Budget Worksheet 2023-25 BN

Use this worksheet to develop an estimated budget for your 2023-25 research problem statement.

Most WSDOT Research Projects are conducted through academic institutions and involve the oversight of a faculty member who serves as the Principal Investigator (PI). PI's select graduate students to conduct research under their guidance. The most desirable period for a project involving a graduate student is two years.

Most research projects include the following costs:

### 1. Principal Investigator salary & benefits:

Est. months \_\_\_\_\_ x Est. monthly cost \_\_\_\_\_ = Est. total \_\_\_\_\_

*Plan to include one to 3 months of the principal investigator's salary and benefits with a typical project. Faculty salary rate = \$8,500 to \$18,000 per month (depends on experience); benefits = 24.6% (UW) or 28.6 (WSU). If you have a preferred or anticipated researcher, use actual costs as your basis. NOTE: UW TRAC professional staff are billed at an hourly rate. Rates vary per individual researcher. Contact the individual PI to get the current rate for that individual.*

### 2. Research Assistant salary & benefits:

Est. months \_\_\_\_\_ x Est. monthly cost \_\_\_\_\_ = Est. total \_\_\_\_\_

*Plan to include (12 to 18) months of a research assistant's time for a typical project. Salaries (rates \$2,698/month) and benefits (22.4% - not including tuition) for UW. Some RAs - such as late-stage PhD students will be slightly more expensive; MS students will be slightly cheaper. For multi-year projects, it is typical to budget a 2% increase in salary each year.*

*WSU salary rates are \$20,852 for 12 months support of a Step 32 MS student starting 08/16/2022. Benefits are 12.4% of salary, plus health insurance at \$2,043 for appointments more than 9 months. Rates vary by appointment start date. Please refer to the budget workbook at <http://orso.or.wsu.edu/guidelines.asp> for benefits rate calculator and GRA Matrices*

### 3. Tuition

Est. semesters/quarters \_\_\_\_\_ x Est. cost \_\_\_\_\_ = Est. total \_\_\_\_\_

*Tuition for the graduate student hired as the Research Assistant on the project, is covered for each semester or quarter of the project. Tuition costs vary by institution. Current tuition costs (8/16/2022) at Washington State University are \$5,858.00/semester or \$13,554/year at University of Washington (2020-21operating + bldg. fee) are \$6,342/quarter or \$19,026/year.*

#### **4. Equipment and resources**

List anticipated equipment and resources needed and estimate the cost for each item.

*Projects may or may not include equipment costs. Consider whether a computer, field equipment, safety equipment, or lab equipment are needed. Projects may or may not include costs for software applications, data, permits, traffic management, shipping, or materials. Note that single pieces of equipment that cost more than \$5,000 are classified as “equipment and are not charged indirect costs on top of their direct costs. When individual pieces of equipment cost less than \$5,000 (like most modern computers) they are classified as a “supply” not as “equipment.”*

*For both UW & WSU, equipment items costing more than \$5,000 are considered capital equipment and are exempt from F&A.*

#### **5. Travel**

*Projects may include field work or travel to meet with technical committees. In addition, WSDOT encourages principal investigators and students to present research findings through agency seminars or technical conferences.*

#### **6. Publication**

*Projects culminate in a published report unless specifically exempted. List all publication costs, including technical editing, 508 ADA compliance, and unusual costs of publication (if paper copies are required, include the cost, including costs of color images). Costs for publication in scientific journals may be included.*

#### **7. Indirect costs**

All research institutions require some overhead. The current rate (6/30/2020) at the University of Washington is 55.5% and at Washington State University 53%. All costs except tuition and large pieces of equipment that cost more than \$5,000 are subject to the indirect rate. For WSU, subcontract amounts over \$25,000 are exempt from F&A.

WSU’s Federally Negotiated Indirect Cost Rate Agreement can be viewed at:

<https://s3.wp.wsu.edu/uploads/sites/1378/2019/08/WSU-FA-Rate-Agreement-2019-2023.pdf>

UW’s Facilities & Administrative Rate information can be viewed at:

<https://www.washington.edu/research/policies/gim-13-facilities-and-administrative-fa-rates/>

#### **8. State Force Work (SFW)**

The project may require some state force work time for traffic management, data gathering, testing, or other support. Include these costs, as needed, in the estimate for the project. In addition, equipment, and material costs that WSDOT plans to purchase for this project may be included as SFW in this budget.

Contact WSDOT staff for labor pricing estimate on employee salaries and benefits

Below table shows monthly salaries for four job classifications based on Washington Office of Financial Management (OFM), Human Resources Office, and Salary Schedule and estimated benefits based upon the Washington State Department of Transportation Cost Distribution Rates for permanent employees at regular time.

Job Class Title	Monthly Salary	Monthly Benefits
Transportation Planning Specialist 2	from \$4,738 to \$6,217	from \$2,303 to \$2,553
Transportation Planning Specialist 3	from \$5,229 to \$6,862	from \$2,408 to \$2,683
Transportation Engineer 2	from \$5,102 to \$6,691	from \$2,382 to \$2,648
Transportation Engineer 3	from \$5,630 to \$7,387	from \$2,492 to \$2,789

### **8. Funding Partnerships**

Please list funding from other sources if you are leveraging WSDOT research funds with another party.