# Academy of Sciences

#### Science in the Service of Washington State

The Washington State Academy of Sciences (WSAS) provides expert scientific and engineering analysis to inform public policy-making, and works to increase the role and visibility of science in the State of Washington.



## Advising Decision-Makers with Independent, Objective, Expert Scientific Analyses

The Washington State Academy of Sciences serves the State of Washington and its citizens by providing expert analyses of scientific and engineering information to inform public policy-making. Its reports evaluate and interpret all information that is relevant to understanding the technical underpinnings of important issues, questions, and problems facing decision-makers. Each member is nominated and elected by professional peers directly by means of a rigorous process. The WSAS also works to increase the role and visibility of science in the State.

#### Independence, Objectivity, and Expertise

Authorized by the state legislature in 2005, the WSAS is a private, nonprofit 501(c)(3) corporation. Its projects and studies are funded from either private or public sources. Modeled after the operational and funding structure of the National Research Council of the U. S. National Academies, the WSAS is free of outside organizational and partisan affiliations that might limit the independence of its work. The WSAS provides the specialized expertise planners and policy-makers need to make informed decisions that serve the public interest.

WSAS studies are rigorously conducted by carefully appointed committees whose members are highly qualified specialists in the technical fields relevant to the goals of each study. After a period of intense fact gathering, committee members carry out the necessary analyses, agree on the results of their analyses, and write the report. Each report is peer-reviewed by independent reviewers and finally approved by the WSAS Board of Directors. Great care is taken that analyses and recommendations are thorough, incorporate a broad range of perspectives, and are insulated from special interests.

#### Scientific Leadership, National Reputation

The members of the WSAS are outstanding leaders in their respective fields. The founding class inducted into membership in 2008, were members of one of the three National Academies – the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine. Many of them also have extensive experience with committees and boards of the National Research Council, the working arm of the National Academies.



#### Advising Decision-Makers

The WSAS was established to provide authoritative scientific and technical analyses to the State of Washington on a host of challenging public issues, including health and health care, transportation, agriculture, energy, biodiversity preservation, biotechnology, climate change, and education. Its reports, which provide reliable, non-partisan, scientific analyses, enable decisionmakers to make their decisions using the best possible scientific and technical information, analyses, and interpretations.

The WSAS does not recommend public policy. It does not accept commissions for studies designed to advocate particular legislation. Rather, its study committees analyze and interpret the available scientific information relevant to important public policy issues. Its peer-reviewed and board-approved reports provide the basis for informed public discussion and decision-making but the appropriate public servants make the final policy decisions. Because carrying out a thorough WSAS study requires substantial time, the WSAS has its greatest value in facilitating advance thinking and preparation so that decision-makers can anticipate problems and develop appropriate response capabilities before challenges become critical.

#### WSAS Projects

The Washington State Academy of Sciences is organized to conduct studies assessing scientific issues and providing technical analyses needed for informed public policy-making. By producing study reports of the highest quality, the WSAS promotes understanding of the importance of the sciences in public affairs.

WSAS projects may be commissioned by the government, legislature, state agencies, local governments, or other entities. Its studies can inform policy decisions, stimulate new research initiatives, or provide program review and assessment.

To provide effective contact with relevant public entities in Olympia, the WSAS established it headquarters at 410 11<sup>th</sup> Avenue SE, Suite 205, Olympia, WA 98501. Its office on the second floor of what is known locally as the IBM building has space for a receptionist/administrative assistant, a public seating area, and an office for the executive director. The Washington State University legislative liaison office and the office of the Council of University Presidents, both on the first floor of the same building, have conference rooms available for use of the WSAS.

In May 2009, Dr. Robert C. Bates accepted the position of interim executive director of the WSAS. This position supplements his 9-month appointment as Director of Research and Graduate Education at WSU Vancouver. Dr. Bates, as the primary contact person with state agencies, legislators, and legislative committees, facilitates the acquisition and conduct of work (commissioned projects) for the WSAS.



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### Criteria for undertaking a study by the WSAS include the following:

- There is relevant and sufficient scientific information available on the issue to be addressed
- Existing reports, if any, are out of date or inadequate
- Sufficient funds are provided by the sponsor to cover study expenses, staff costs, and study-related overhead

Study committee members serve without compensation.

Typically, studies move through four phases: statement of task; committee formation; analysis and report preparation; and report review, approval, and publication. Each of the phases is designed to ensure that the analyses and evaluations of information provided to sponsors are of the highest quality.

#### Statement of Task

When a sponsor contacts the WSAS for a potential project, staff from the sponsor and the WSAS work together to define the specific questions and issues the study will address. This step, which is critical for effective results, determines the types of expertise that need to be represented on the study committee, focuses the proposed information gathering and analyses, and determines the scope and nature of the report. It allows WSAS to determine if the project can be successfully undertaken and to decide if the request is consistent with its independent, objective, nonpartisan mission.

#### Committee Formation

After a proposed commission has been accepted, the study committee is carefully selected. Specialists with the needed expertise, from both within and outside the WSAS, are nominated for participation. Final composition of the committee is determined by the WSAS Board. Nominees with conflicts of interest are excluded from consideration. The perspectives of the nominees are also carefully weighed in making the final selection so that a broad range of viewpoints is brought to bear on committee deliberations to ensure that project reports are comprehensive and balanced. Once constituted, the study committee membership is posted on the WSAS website. Throughout the project the study committee is monitored for new or apparent conflicts of interest.

#### WSAS Committee Structure

To facilitate its operations and provide a rigorous framework for electing new members, in 2009 the WSAS established, in addition to the existing Executive Committee, five internal committees.

**Nominations Committee for Election of Officers**, tasked with the development and presentation of a slate of officers to be elected by members and presented at the annual meeting of the WSAS.

**Membership Committee**, tasked to 1) develop a process for identification of highly qualified candidates residing within Washington for election to membership in the WSAS.

**Study Oversight Committee**, responsible for evaluation and approval of mandates (statements of tasks) for panels/ committees formed by the WSAS for commissioned projects contracted with state agencies and other entities as per the purpose of the WSAS.

**Finance Committee**, chaired by the Treasurer and responsible for the safe and legal custody of all financial resources of the WSAS.

**Annual Meeting Planning Committee**, chaired by the President-Elect and responsible for preparation of the agenda, program, and all technical and logistical arrangements for the annual meeting.

These five internal committees will increasingly carry out the work of the WSAS, including developing and recommending policy for approval by the board of directors or the membership.

#### Analysis and Report Preparation

With assistance from the WSAS staff, committee members conduct information-gathering meetings, analyze the scientific literature, assess existing reports, and examine other data needed to answer the questions and deal with the issues posed in the statement of task. Though some of its work involves public, fact-gathering meetings, the committee's deliberations are held in private to protect it from outside influences that might inappropriately bias its evaluation of evidence as it prepares its report.

#### Report Review, Approval, And Publication

Draft reports are subjected to anonymous, expert peer review. Reviewers determine whether the report responds thoroughly to the questions and issues for which the study was commissioned, evaluate the adequacy of evidence assessed by the study committee, and analyze the reasoning by which the report's conclusions were reached. When the reviewers' judgments have been taken into consideration by the committee, and appropriate revisions have been made, the report is reviewed and approved by the WSAS Board of Directors. The final approved report is delivered to the sponsor and published on the WSAS website for public access.

#### **Inaugural Projects**

The WSAS was commissioned by statute to assist the Puget Sound Partnership (PSP) in its efforts to protect and restore Puget Sound. As mandated, the WSAS recommended 15 experts to the PSP's Leadership Council, from which the Council selected its ninemember Science Panel. The WSAS has also evaluated nominees to replace Science Panel members whose terms were expiring.



The WSAS has been retained to conduct interim assessments of progress in the PSP's implementation of its 2020 Action Agenda.

It has also provided input to the design of the environmental indicators and benchmarks selected by the PSP to ensure that they accurately, measure and reflect progress toward the PSP's restoration goals.

The WSAS is also working to encourage the participation of Washington youth in science projects, including in labs of its members. Through member donations, the WSAS provided full support of a Seattle-area high-school student to attend the annual meeting of the American Junior Academy of Sciences held in February, 2010 in San Diego.

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#### Commissioning a Study

For further information on WSAS projects and for questions about how to commission a study, contact Robert Bates, Executive Director.

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