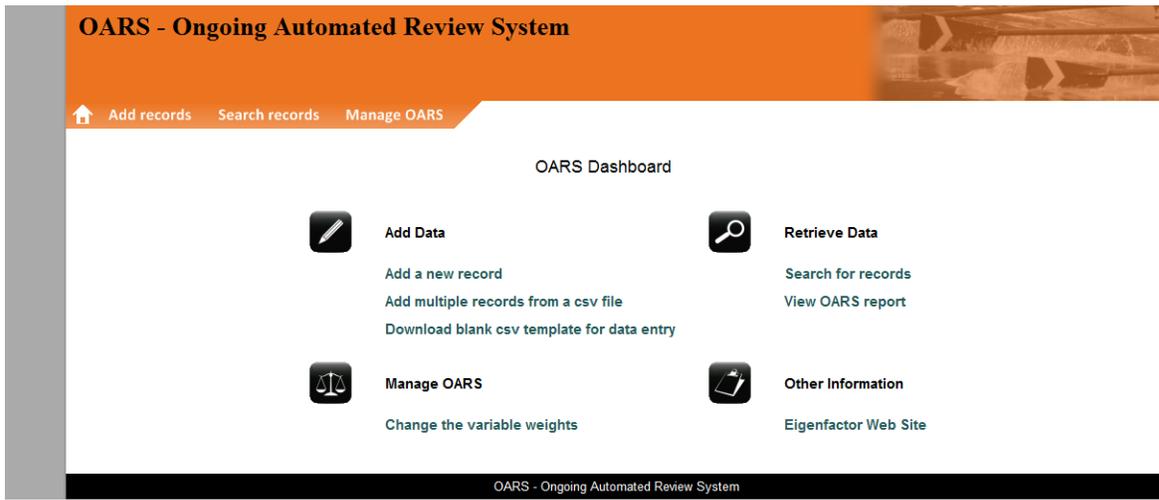


# Welcome to OARS: The Ongoing Automated Review System!



## Background

OARS is an open-source program, as defined by the [Open Source Initiative](#). OARS was originated by Geoffrey P. Timms and Jonathan H. Harwell, programmed by Mr. Timms in 2009, refined through 2011, and made publicly accessible in March 2012. OARS has been presented at four national conferences: the Acquisitions Institute at Timberline Lodge, the LITA National Forum, the Annual Charleston Conference, and the American Library Association Annual Conference. We were encouraged by the feedback, with several colleagues lamenting that no vendor had created such a product, and that so many libraries have had to invent their own time-intensive processes when faced with budget cuts, which have recently become the norm in library funding.

The OARS metric was developed for standardizing the process of assessing subscriptions. OARS automates the selection of titles and data for review, which will result in a semi-automated process for annual renewal decisions. OARS uses four customizable variables with adjustable scales, as well as a cumulative weighted scale of all variables which it uses to recommend a renewal decision. OARS uses automated

processes as much as possible, and provides data entry forms and an upload option for easy input.

The four variables are:

- Cost - which is used to calculate *cost as a percentage of the average cost* of all serials represented in the OARS database.
- Usage - which is used to calculate *usage as a percentage of the average usage* of all serials represented in the OARS database.
- Rating - which is used to assign a percentage value to a simple expression of necessity (essential=100%, desirable=50%, or not needed=0%). In the context of an academic library, this rating might be assigned by instructional faculty.
- Eigenfactor Article Influence Percentile - which represents the average influence per article for a particular journal.

The calculated variables are then converted to scores on a scale of 100. Costs are scored with the formula:

$$\text{Cost Score} = (-0.5 \times \text{Cost as a percentage of average cost}) + 100$$

Thus, if a serial's annual cost as a percentage of average cost is 100%, the score is 50; if it is 50%, the score is 75; and if it is 150%, the score is 25. Usage is scored with the formula:

$$\text{Usage Score} = 0.5 \times \text{Usage as a percentage of average usage}$$

Thus, if the usage as a percentage of average usage is 100%, the score is 50; if it is 50%, the score is 25; and if it is 150%, the score is 75. In each case, the scores are capped with a minimum of 0 and a maximum of 100.

The variable scores are then weighted and combined to create the final OARS Score for each serial. The weightings are managed in a form (see below) and permit the user to adjust the impact of each variable score in the calculation of the final OARS score. By virtue of the relative nature of the cost and usage scores, OARS scores are not

static for any given resource. An adjustment of cost in one resource, for example, changes the average cost, thus changing the cost as a percentage of average cost for all serials. An OARS Score, then, is valid only in the context of the report in which it was created. This ensures that each serial is re-evaluated in each new report, relative to all of the other serials represented in the database.



The screenshot shows the OARS - Ongoing Automated Review System interface. At the top, there is a navigation bar with a home icon and links for 'Add records', 'Search records', and 'Manage OARS'. The main content area is titled 'Change Variable Weights' and contains a table with the following data:

	Cost	Usage	Rating	Eigenfactor	Total
Current Weights:	40	30	15	15	100
New Weights:	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text"/>

Below the table is a 'Submit' button. The footer of the page reads 'OARS - Ongoing Automated Review System'.

Analysis of test data with actual statistics from Georgia Southern University shows that some titles were rated by faculty as “excellent,” but had low usage; and others were “not needed,” but one of those was actually the most used title in the test data. Basing cancellation decisions on all of the above factors is more justifiable, in the context of data-driven decision making, than cancelling all “not needed” titles and renewing all “essential” titles solely based upon faculty recommendations. Because the variable weights can be adjusted easily on the fly by each library, more priority can be given to one or more factors according to the local situation.

### Getting Started with OARS

You can add individual records to the database, or upload a set of records in a CSV spreadsheet such as Excel. OARS tests for duplicates via the unique control number within each record. The control number system may be locally established or a standard system, such as OCLC number, may be used. Duplicate records and

successfully uploaded records are reported on-screen in tables and are also made available for download in CSV files.

The screenshot shows the OARS - Ongoing Automated Review System search interface. At the top, there is an orange header with the text "OARS - Ongoing Automated Review System". Below the header, there is a navigation bar with three items: "Add records", "Search records", and "Manage OARS". The main content area is titled "Search for Records". A note states: "\*Note - All text fields are searched in natural language mode. The LC field only can be searched in boolean mode, using the asterisk(\*) as a wildcard." Below the note, there are three search criteria: "Title", "Year", and "Publisher". Each criterion has a text input field and a dropdown menu. The "And" dropdown menus are currently set to "And". Below the search criteria, there is a "Sort by:" section with a dropdown menu set to "Cost" and two radio buttons for "Ascending" (selected) and "Descending". At the bottom of the search area, there are "Submit" and "Reset" buttons. The footer of the page contains the text "OARS - Ongoing Automated Review System".

The search interface, with sorting functions, allows use of the asterisk (\*) as a wild card only when searching by Library of Congress Call Number (QA\* for example). Each search term must contain at least four characters. In your search results, most fields from each record are displayed, including buttons you can use to view, edit, or delete the record in a new window. There are also up and down arrows at the top of most columns, which you can use to sort the results in ascending or descending order. The search results are then refreshed automatically to account for any edits made.

edit record  view record  delete record 

title	year	control	issn	eissn	lc	publisher	entanglement	notes	cost	usagedata	rating	eigenfactor	
College student affairs journal.	2011	10000529			LB2341 .C7121		free				e		  
Journal of engineering education.	2011	10000538			T61 .J45		gift				e	32.26	  
Journal of band research.	2011	10001194			ML1 .J83				8.00		e		  
Journal of the print world.	2011	10001201			NE1 .J68				15.00		d		  
Southern social studies journal.	2011	10001203			H62 .A1 S681				15.00		e		  
Old-house journal.	2011	10001212			TH3401 .O43				19.97		n		  
Berkeley journal of sociology	2011	10001235			HM1 .B4				24.72		d		  
Georgia journal of reading.	2011	10001245			LB1050 .G43				27.00		d		  
Keats-Shelley journal	2011	10001253			PR4836 .A145				28.00		n		  
Journal of technology studies.	2011	10001269			T61 .J551				30.00		n		  
Marketing management journal.	2011	10001292			HF5415.13 .J681				35.00		e		  
American fern journal.	2011	10001295			QK520 .A6				35.00		n	9.47	  

OARS variables can be weighted on the fly. Depending on your library's priorities, you can make each variable worth more or less, as long as the total of all four variables is exactly 100%.

You can specify a certain percentage or dollar amount to cut from the subscription budget. In each case, OARS will list records in the report until the percentage or dollar amount has been reached. You can read it on the screen or download it as a CSV spreadsheet such as Excel. You can also choose to display a certain percentile of titles with the lowest OARS scores, based on the number of titles rather than a certain budget amount.

## Create a report

### Report Criteria

Specify the year from which data will be used:

Which method are you using to determine the suggested title cuts?

How much must you cut from your subscription budget? \$

Include entangled titles?