# Calculating Costs Associated with OER Implementation One-Page Summary Craig Hashbarger

## Why This Audit?

In October 2014, the North Dakota State Board of Higher Education expressed its support for OER in its strategic plan, including a strategy to "increase the use of open educational resources". Our audit evaluated the success of this initiative and developed recommendations to sustain/expand OER.

### **Cost Per Book**

We selected 10 general education courses comprising of 31 credits, which are available at all 11 of the North Dakota University System (NDUS) institutions. We researched the textbook requirements and costs for those courses at each institution based on actual Spring 2018 prices. We identified the cost to purchase the books from each bookstore new, as well as, where available, the cost to purchase used versions, and the cost to rent hard copies or electronic copies. The median textbook cost for these 10 courses ranged from a low of \$734 to a high of \$1,660. We considered but then omitted third party website costs due to limitations on quantity, as well as quality control and other concerns. We reported potential savings based on both the low and high number.

We reviewed several outside studies which used different methodologies to calculate textbook costs, and we compared these to our own calculation. Our calculated range of textbook costs at NDUS appeared to fall within the ranges identified in various outside studies.

### Number of Students

To identify the number of students impacted, we obtained a listing from the management of each NDUS institution of all known sections of courses which exclusively used OER starting with the Fall 2014 semester and ending in the Fall 2017 semester. Summer semesters were excluded due to much lower enrollment and impact. We then tested the accuracy of the OER listing by obtaining and reviewing the course syllabus for selected sections.

#### **Total Cost Savings**

We calculated the enrollment of these courses from reports we generated from the university system's enrollment records. For purposes of this analysis, we included only courses that used exclusively OER materials exclusively (that is, if a course partially utilized OER but also required a purchased textbook, it was excluded from our results). We used the definition of OER provided by the Hewlett Foundation.

Using the median high and low textbook costs from our test of 10 NDUS courses, we computed the per credit cost and multiplied it by the number of credit hours per course and number of students.

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